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August 6, 2015

Ms. Amy Owens
Regional Director
Department of Environmental Quality
Valley Regional Office
4411 Early Road
Harrisonburg, Virginia 22801

RE: Dominion - Bremo Power Station VPDES Permit No. VA0004138
Permit Application Addendum

Dear Ms. Owens:

Attached please find a Permit Application Addendum for the Virginia Pollutant Discharge Elimination System (VPDES) Permit application (renewal) that has been submitted to the Virginia Department of Environmental Quality (DEQ) for the Bremo Power Station in Fluvanna County, Virginia. As you are aware, Virginia Electric and Power Company (Dominion), owner and operator of the Bremo Power Station, submitted an application to renew the existing VPDES Permit for the Bremo Power Station to the DEQ on January 14, 2015, and the application has been deemed complete by DEQ.

As part of the renewal process, Dominion is submitting this Application Addendum outlining needed process water routing changes that have been identified subsequent to the initial application submittal. The routing changes are necessary for closure and construction activities at the West Ash Pond, East Ash Pond, and North Ash Pond pursuant to the United States Environmental Protection Agency's (EPA's) promulgation of the Coal Combustion Residuals (CCR) regulations (CCR Final Rule) in April 2015. Under the relevant provisions of the CCR Final Rule, Dominion must complete closure activities no later than April 17, 2018. In order for Dominion to meet this deadline, process water routing changes must occur on or before January 1, 2016, in advance of closure activities. In addition to closure of the CCR ponds, the station plans to close the Metals Pond. The information presented in this addendum is designed to assist the DEQ with understanding the proposed changes and processing the permit renewal.

Should you have any questions regarding this submission, please contact Ken Roller with Dominion at 804-273-3494 or Kenneth.roller@dom.com

Sincerely,

Cathy C. Taylor

Cathy C. Taylor
Director, Electric Environmental Services

Attachment: Permit Application Addendum, *Virginia Pollutant Discharge Elimination System Permit No. VA0004138, Virginia Electric and Power Company, Bremo Power Station*

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: David A. Craymer

OFFICIAL TITLE Vice President, Power Generation System Operations

PHONE NO.: (804) 273-3685

SIGNATURE: David A. Craymer

DATE SIGNED: 8/5/15

PERMIT APPLICATION ADDENDUM

Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0004138

Virginia Electric and Power Company

Bremo Power Station

Dominion

Submitted To: Commonwealth of Virginia
Department of Environmental Quality
Valley Regional Office
P.O. Box 3000
Harrisonburg, VA 22801

Prepared For: Virginia Electric and Power Company
1038 Bremo Road
Bremo Bluff, VA 23022

Prepared By: Golder Associates Inc.
2108 W. Laburnum Avenue, Suite 200
Richmond, VA 23227

August 2015

Reference No. 1520-347.300

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EXECUTIVE SUMMARY

The Bremo Power Station (Station) is located in Fluvanna County, Virginia at 1038 Bremo Road, just east of Route 15 (James Madison Highway) and north of the James River. The Station is owned and operated by Virginia Electric and Power Company, operating as Dominion. The Station recently converted from a coal-fired power plant to a natural gas-fired power plant. Coal Combustion Residuals (CCR) from historical coal-fired operations are stored in three impoundments on-site (North Ash Pond, West Ash Pond, and East Ash Pond). Process water from these ponds and other Station activities has historically been discharged with contact stormwater to the James River pursuant to the authorization, limits, and conditions of a Virginia Department of Environmental Quality (DEQ) Virginia Pollutant Discharge Elimination System (VPDES) Permit (Permit No. VA0004138).

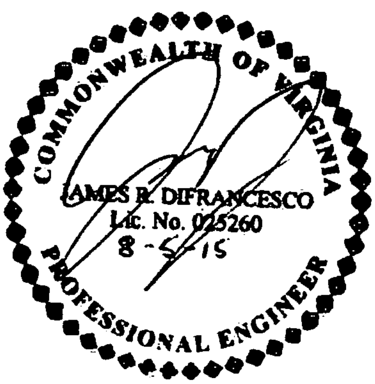
In anticipation of the CCR Final Rule, Dominion began planning for the permanent closure of the North Ash Pond, West Ash Pond, and East Ash Pond as inactive CCR surface impoundments. The West Ash Pond will be closed in accordance with §257.100(b)(5) of the CCR Final Rule through removal of CCR (i.e., "clean closure"). The North and East Ash Ponds will be closed in accordance with §257.100(b)(1) through (4) of the CCR Final Rule by capping the CCR in place (i.e., "closure-in-place"). The process water generated by the Station is expected to change during and after the closure activities.

Accordingly, Dominion has prepared this Permit Application Addendum (Addendum) for the Bremo Power Station to clarify the existing stormwater and process water conditions, the proposed conditions that will exist during closure activities, and the conditions that will exist after closure is completed, which is expected before April 17, 2018. Based on the process water characterization activities that were completed for the project, Dominion has identified certain process waters (i.e., waters generated by dewatering the ponds, referred to herein as "dewatering water") as possibly requiring treatment beyond that which is already in place at the Station. Based on these findings, a Pre-treatment System has been conceptually designed to treat the dewatering water as needed to protect water quality and achieve water quality-based limits established by DEQ. Dominion anticipates operating the Pre-treatment System as needed for the duration of the construction project.

SIGNATURE PAGE

This Addendum has been prepared by a qualified engineer on behalf of Virginia Electric and Power Company (Dominion) for the Bremo Power Station in Fluvanna County, Virginia. The Addendum is designed to address and explain proposed changes in stormwater and process water discharges that are anticipated at the Bremo Power Station until and after the site closure activities are considered complete (prior to April 17, 2018).

Signature: | Name & Title



Ron DiFrancesco, P.E.
Principal and Senior Consultant

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Golder Associates

1.0 INTRODUCTION

The Bremo Power Station (Station) is owned and operated by Virginia Electric and Power Company (Dominion) in Fluvanna County, Virginia. The approximate location of the Station is illustrated on the inset United States Geological Survey (USGS) topographic map on Drawing 1. Stormwater and process water generated by the Station are currently discharged to the James River via nine permitted outfalls – 001, 101, 002, 202 (internal outfall), 203 (internal outfall), 204 (internal outfall), 003, 004, and 006. The approximate locations of the existing permitted outfalls are shown on Drawing 2. The outfalls are permitted under a Virginia Department of Environmental Quality (DEQ) Virginia Pollutant Discharge Elimination System (VPDES) Permit (Permit No. VA0004138). The permit was issued on August 13, 2010, and has an expiration date of July 31, 2015. An application for reissuance of the permit was submitted to DEQ on January 14, 2015. This Permit Application Addendum (Addendum) is an addendum to the January 14, 2015, reissuance application.

The purpose of this Addendum is to describe Dominion's planned efforts to close three existing ash impoundments (North, West, and East Ash Ponds) under the CCR Final Rule. As a result of the closure activities, the configuration for process water and stormwater management activities at the Station will change from that which is currently permitted and proposed in the January 14, 2015, renewal application.[1] This Addendum presents the proposed:

- changes in the stormwater and process water management configuration that will be required during project closure activities through April 17, 2018 (interim period), and
- operating configuration for stormwater and process water management following the completion of closure activities (final period).

Details for the existing, interim (construction phase), and final (post-construction) water management configurations are presented in the following sections of this Report.

[1] It should be noted that some of the planned changes in wastewater sources and configurations that will occur during the closure process will not appreciably change the characteristics of existing discharges beyond those anticipated by the existing permit. Consequently, Dominion will be submitting a separate Notice of Planned Changes for these activities, requesting DEQ concurrence that they may be carried out under the existing permit.

2.0 EXISTING OPERATING CONFIGURATION

Stormwater and process water generated by the Station are currently discharged to the James River via nine (9) VPDES permitted outfalls. A map of the Station, ponds, and existing permitted outfalls is provided as Drawing 2. The source waters to each outfall are described in detail in the January 14, 2015, application for reissuance, included in the detailed One-line Diagram in Appendix I of this Addendum, and are summarized below.

Outfall	Source Water/Process
001	Condenser Cooling Water
101	Intake Screen Backwash
002	Industrial Stormwater (West Ash Pond)
202	Metals Cleaning Waste Treatment Basin (directed to 002)
203	Sewage Treatment Plant (STP; to 002 via Stormwater Management Pond)
204	Coal Pile Runoff (directed to 002 via Stormwater Management Pond; SWMP)
003	Non-contact Stormwater (East Ash Pond)
004	Industrial Stormwater (North Ash Pond)
006	Non-contact Stormwater (Station area outside of floodwall)

The existing operating configurations for outfall 202 (Metals Pond), outfall 002 (West Pond), outfall 003 (East Pond), outfall 204 (Stormwater Management Pond), and outfall 004 (North Ash Pond) are summarized in the following sections, as the configuration for these outfalls is proposed for modification under this Addendum.

2.1 Outfall 202 - Metals Pond

As depicted on Drawing 2, the Metals Pond is located on the west side of the West Ash Pond in the western area of the Station. The Metals Pond has historically been used to manage the Station's metals cleaning wastewater. The pond is no longer needed for this purpose and, consequently, Dominion plans to close the Metals Pond during the ash pond closure process. As illustrated on the One-line Diagram in Appendix I (under the source water heading stormwater/groundwater) and on Drawing 3 (Process Flow Diagram for existing conditions), water from the Metals Pond is discharged intermittently through internal outfall 202 to the West Ash Pond, with the West Ash Pond discharging to the James River via outfall 002. The currently permitted operating conditions for the Metals Pond are expected to continue through October 18, 2015, at which time closure activities for the Metals Pond (accumulated materials and water removal) are expected to commence.

2.2 Outfall 002 - West Ash Pond

As presented on Drawing 2, the West Ash Pond is located in the western area of the Station. The West Ash Pond is an active pond that was formerly used for CCR management, and is currently used to manage the Station's low-volume industrial wastewater. As illustrated on the One-line Diagram in Appendix I and on Drawing 3 (Process Flow Diagram for existing conditions), water from the West Ash

Pond is routed through a series of drainage structures to outfall 002. The currently-permitted operating conditions for the West Ash Pond are expected to continue through October 18, 2015, at which time closure activities (accumulated materials and water removal) are expected to commence.

2.3 Outfall 003 - East Ash Pond

As depicted on Drawing 2, the East Ash Pond is located in the southeast area of the Station. The East Ash Pond is an inactive pond that was formerly used to manage CCR. As illustrated on the One-line Diagram in Appendix I (under the source water heading stormwater/groundwater) and on Drawing 3 (Process Flow Diagram for existing conditions), non-contact stormwater from the East Ash Pond currently is routed through a series of drainage structures on an intermittent basis (precipitation dependent) to outfall 003. The currently permitted operating conditions for the inactive East Ash Pond are expected to continue through January 1, 2016, when closure (capping) activities are expected to begin with pre-construction dewatering activities.[2]

2.4 Outfall 204 - Stormwater Management Pond

As depicted on Drawing 2, the Stormwater Management Pond is located in the central area of the Station property. The Stormwater Management Pond has historically been used primarily to manage coal pile stormwater runoff and other secondary process water sources as illustrated in the One-line Diagram (Appendix I). With removal of the coal pile following conversion of the Station from a coal-fired power plant to a natural gas-fired power plant, the pond has been maintained for managing stormwater runoff from the Station, as well as the secondary Station low volume process water sources (existing permitted source waters). The North Ash Pond toe drain is also routed to the Stormwater Management Pond.

As illustrated on the One-line Diagram in Appendix I and on Drawing 3 (Process Flow Diagram for existing conditions), water from the Stormwater Management Pond is routed to the West Ash Pond via internal outfall 204, with the West Ash Pond discharging to the James River via outfall 002. The currently permitted operating conditions for the Stormwater Management Pond are expected to continue through September 1, 2015, when the influent water source to the West Ash Pond will need to be eliminated to lower the water level in the West Ash Pond to complete the dredging activities by October 18, 2015, when closure of the West Ash Pond is initiated. It will be necessary to route outfall 204 directly to outfall 002 in order to complete removal of the ash from the West Ash Pond. A more complete description of the outfall 204 rerouting will be provided in a separate Notice of Planned Changes, which will request DEQ concurrence that the activity may proceed under the existing permit.

[2] On June 17, 2015, Dominion contacted DEQ concerning the determination that groundwater from the area associated with the East Ash Pond contributes to a drainage feature associated with existing Outfall 004. Subsequent related correspondence concerning this groundwater contribution was provided to DEQ by letter dated June 22, 2015 and in a separate permit application addendum submitted by letter dated June 30, 2015.

2.5 Outfall 004 - North Ash Pond

As depicted on Drawing 2, the North Ash Pond is located in the northeast area of the Station property. The North Ash Pond is used to manage CCR. As illustrated on the One-line Diagram in Appendix I and on Drawing 3 (Process Flow Diagram for existing conditions), contact stormwater from the North Ash Pond is routed via a series of drainage structures to outfall 004. The North Ash Pond also receives dredged ash and associated source waters (see Section 3.1 for source water descriptions) from the West Ash Pond. The currently permitted operating conditions for the North Ash Pond are expected to continue through October 18, 2015, at which time the placement of CCR in the pond will cease, and closure (capping) activities are expected to begin with pre-construction dewatering activities.

3.0 CLOSURE ACTIVITIES

Dominion intends to permanently close the North and East Ash Ponds as inactive CCR surface impoundments under the CCR Final Rule. The West Ash Pond will be clean-closed in accordance with §257.100(b)(5) of the CCR Final Rule through removal of the CCR, which will be accomplished by April 17, 2018. A map of the Station's proposed conditions and permitted outfalls is provided as Drawing 3.

The North and East Ash Ponds will be closed-in-place in accordance with §257.100(b)(1) through (4) of the CCR Final Rule by removing free liquids and capping the CCR in place, which will also be completed by April 17, 2018. Once closed as inactive CCR impoundments, the North and East Ash Ponds will no longer be subject to the requirements of the CCR Final Rule; rather, it is anticipated that DEQ will regulate these closed inactive surface impoundments pursuant to the Virginia Solid Waste Management Regulations (VSWMR).

During the closure activities scheduled for completion no later than April 17, 2018, stormwater and process water will continue to be discharged from Station outfalls 001, 101, 203, and 006 with no changes to existing permitted conditions. It is anticipated that these discharges will continue to be covered under the VPDES Permit as renewed and reissued by the DEQ. The discharges from outfalls 002, 202, 003, 204, and 004 are also proposed for inclusion in the renewed and reissued permit; however, as discussed below, the wastewaters contributing to these discharges will change (outfalls 002, 003, and 004); be eliminated as the source systems are modified or taken off-line (outfall 202); or be temporarily re-routed as a result of the ash pond closure process (outfall 204).

Details for the proposed closure activities and associated wastewater management are discussed in the following sections. Dominion would like to have flexibility to properly manage stormwater and process water generated during the closure process. Consequently, we are providing a number of options for the handling and discharge of the water sources that will be generated during the closure process associated with each pond. A Tentative Closure Construction Schedule is presented in Appendix II.

3.1 Source Waters

Discharge source waters associated with the closure of the three inactive CCR impoundments are:

1) impoundment decant water,
2) construction dewatering water,
3) contact stormwater,
4) construction non-contact stormwater,
5) post-construction stormwater discharges,
6) Stormwater Management Pond,
7) Metals Pond, and
8) North Ash Pond Toe Drain.

A description of each of these closure discharge source waters follows:

3.1.1 Impoundment Decant Water

Impoundment decant water (IDW) includes surface waters that result from the commingling of a number of wastewater types, including but not necessarily limited to: stormwater, low volume wastewater, sewage treatment plant (STP) discharges, ash dewatering water, and waters that are used to convey CCR to an impoundment through sluicing or dredging. As an initial step in the process leading to the closure of the West and North Ash Ponds, it will be necessary to remove the IDW in order to complete removal of the ash (West Ash Pond) or allow for dewatering of the ash in order to prepare a stable surface on which to construct the closure cap (North Ash Pond). IDW is currently permitted for discharge through outfalls 002 and 004.

3.1.2 Ash Dewatering Water

Ash dewatering water (ADW) is considered to be the pore water within the CCR mass. ADW refers to the water that is produced from the dewatering of the ash in order to stabilize the ash and allow for its removal by mechanical dredging or its grading for the construction of a closure cap system. It is generated from the CCR dewatering process through mechanical means (*e.g.*, vacuum wells, sump pumps, or other *in situ* withdrawal methods) and from cutting drainage ditches or rim ditches into the CCR mass. Consequently, some ADW would be expected to be present in the IDW in both the West and North Ash Ponds during dredging of the ash mass from the West Pond to the North Pond. Ash dewatering water will be produced during the process leading to closure of both the North and East Ash Ponds, and Dominion will need to manage this wastewater independently or in combination with other waste streams.

3.1.3 Contact Stormwater

Contact stormwater is stormwater runoff that has contacted the CCR. Contact stormwater may be present in the IDW for both the West and North Ash Ponds. Contact stormwater will be generated during closure activities for each pond (North, East, and West Ash Ponds) and must be removed from the working areas in order to close the ponds.

3.1.4 Construction Non-contact Stormwater

Construction non-contact stormwater is the stormwater runoff generated during closure activities that has not contacted CCR, but is subject to the permitting requirements under the Virginia Stormwater Management Program (VSMP). Areas where construction non-contact stormwater may be generated include the West Ash Pond after the CCR material has been removed, the North and East Ash Ponds after installation of the geomembrane liner (CCR no longer exposed), and other land disturbance areas that do not expose CCR associated with the closure activities (e.g., soil stockpile, laydown areas, haul roads).

Dominion proposes to discharge construction non-contact stormwater through temporary surface water outfall locations identified and permitted under the VSMP.

3.1.5 Post-construction Stormwater

Post-construction stormwater is the non-contact stormwater runoff from the closed CCR impoundments and restored disturbed areas after they are stabilized. This discharge water is considered non-contact both under the VPDES and VSMP permits, and does not require post-construction water quality treatment based on the improved post-construction land cover condition of transitioning from open water/impervious area to a managed turf condition.

It is proposed to discharge post-construction stormwater through newly established permanent surface water outfall locations.

3.1.6 Stormwater Management Pond

See Section 2.4 for a description of wastewater sources to the Stormwater Management Pond.

3.1.7 Metals Pond

See Section 2.1 for a description of wastewater sources to the Metals Pond.

3.1.8 North Ash Pond Toe Drain

The North Ash Pond toe drain water (i.e., from the designed toe drain system for the dam) is currently routed via an open ditch to the Stormwater Management Pond as allowed under the existing VPDES permit. At the time of closure, the toe drain water will be routed via a gravity pipe to the Stormwater Management Pond for treatment and discharge through outfall 002.

3.2 Source Water Characterization

As described in Section 3.1.1, Impoundment Decant Water (IDW) may consist of a combination of different wastewater sources. The chemical characteristics of IDW are presented in the Form 2C and Attachment A for outfall 002 (also representative for outfall 004) that were submitted with the January 14, 2015, permit application.

Contact stormwater may be present in the IDW for both the West and North Ash Ponds, and as a surface water, is expected to be similar in quality to IDW, but may contain slightly higher concentrations of certain constituents (e.g., TSS).

To characterize the expected quality of ADW, Stormwater Management Pond effluent, Metals Pond decant water, and the North Ash Pond toe drain water, a series of sampling events was conducted between March and June 2015 by an independent consultant, and by Dominion in January 2015.[3] During these events, samples were collected from representative locations within the source stream for various analyses.

A matrix illustrating the sampling locations and constituents that were analyzed by event is presented in Table 1.[4] To evaluate the expected quality of the construction dewatering water, samples were collected from two piezometers that were constructed within the CCR mass of the North and East Ash Ponds. These piezometers, PZ-1 and PZ-2, respectively, were sampled to generate data representative of the expected dewatering water quality without additional treatment.

During each sampling event for each source water, representative samples were collected using appropriate equipment by qualified sample technicians following EPA surface water sampling protocols and industry standards for groundwater sampling. Samples collected for dissolved analysis were laboratory-filtered with a 0.45-micron filter.

The samples were collected in laboratory-provided, pre-preserved (laboratory-filtered metals containers were preserved by the laboratory after filtering), pre-labeled sample containers and placed on ice in a cooler under chain-of-custody control pending delivery to the laboratory for analysis. Samples for analysis by Environmental Conservation Laboratories, Inc. (ENCO) of Cary, North Carolina were shipped to ENCO via commercial overnight courier under chain-of-custody control, and samples for analysis by Air, Water and Soils Laboratories, Inc. (AWS) of Richmond, Virginia, were delivered to AWS under chain-of-custody control. Both AWS and ENCO and their subcontractor laboratories are Virginia Environmental Laboratory Accreditation Program (VELAP) accredited laboratories. The results of the laboratory analyses are presented in Table 2 and are summarized in Table 3.

3.2.1 *Impoundment Decant Water, Contact Stormwater, Construction Non-contact Stormwater, and Post-construction Stormwater*

The characteristics of IDW are presented in the application for reissuance of Bremo Power Station's VPDES permit, and Dominion plans to continue to discharge IDW during the closure process in accordance with the existing VPDES permit. Polymers may be added to the West and North Ash Ponds to control TSS concentrations as allowed under the permit.

[3] Sampling of the Stormwater Management Pond was performed on January 20, 2015. The samples were collected by Dominion environmental professionals in accordance with EPA protocols and were analyzed by either Dominion Laboratory Services or Air, Water and Soil (both Virginia certified laboratories) using 40 CFR Part 136 methods. Results of these analyses are also included in Table 2.

[4] During the initial events, sampling and analyses were performed for a selected list of parameters based on the known characteristics of the wastestreams. However, following discussions with DEQ staff the list was expanded to include all parameters that would typically be determined during preparation of a VPDES permit application (i.e., EPA Form 2C and DEQ Attachment A parameters).

As discussed above, contact stormwater is expected to be similar in characteristics to IDW, but may contain somewhat higher concentrations of certain constituents (e.g., TSS). Therefore, the proposed pre-treatment system for contact stormwater will treat TSS. Pre-treatment will be implemented, as necessary, during the closure activities of the West and North Ash Ponds.

No treatment will be needed for the Station's construction non-contact and post-construction stormwater.

3.2.2 Ash Dewatering Water

As presented in Table 2 and summarized in Table 3, the samples collected from PZ-1 (North Ash Pond CCR) and PZ-2 (East Ash Pond CCR) are representative of the expected ADW quality prior to any additional treatment. The sample results indicate elevated metals concentrations (total and dissolved) for certain metals, particularly in the PZ 2 samples collected from the East Ash Pond. The elevated metals concentrations appear, in part, to be related to the geochemical conditions (reducing) present within the saturated materials. Specifically, the nearly neutral pH conditions coupled with the low oxidation-reduction potential have facilitated the dissolution of certain minerals, resulting in relatively increased concentrations for certain elements in the AWD samples when compared to other source waters. In general, these elements are: antimony, arsenic, barium, boron, cadmium, chromium, cobalt, copper, lead, lithium, magnesium, manganese, nickel, potassium, phosphorus, thallium, vanadium, and zinc. The total dissolved solids (TDS) concentrations in the AWD samples are elevated with respect to the other source waters, with the exception of the Metals Pond. In addition, the AWD samples have elevated TSS concentrations in comparison to the other source waters, contributing to the elevated metals concentrations. In general, the dissolved metals concentrations in the AWD samples (PZ 1 and PZ 2) are substantially lower than the total metals concentrations, indicating the attenuating effect of filtration on the metals concentrations. Notable exceptions are boron, lithium, and molybdenum.

With the exception of Chemical Oxygen Demand (COD), the remaining constituents/parameters that were detected during the AWD characterization sampling activities exhibit concentrations that are generally similar to those observed in the other source waters. The elevated metals concentrations are expected to be attenuated significantly with TSS controls, and thus, the conceptual pre-treatment system is designed to remove TSS with provisions for metals recovery using pH buffering, aeration, and other oxidative processes combined with hydraulic retention time and solids recovery. Dominion believes that the pre-treatment system will be sufficient to attenuate the observed metals concentrations to concentrations protective of water quality.

3.2.3 North Pond Toe Drain, Metals Pond, and Stormwater Management Pond

Results for the Stormwater Management Pond are very similar to data for outfall 002 submitted with the VPDES permit application. In order to complete closure of the West Ash Pond, it will be necessary to route the Stormwater Management Pond directly to outfall 002. Dominion will be submitting a separate

Notice of Planned Changes that will demonstrate the similarity between the Stormwater Management Pond and outfall 002, and request DEQ concurrence that the rerouting of the Stormwater Management Pond may be accomplished under the existing permit.

The results for the majority of parameters measured in the North Pond Toe Drain and the Metals Pond were similar to those measured in the Stormwater Management Pond. The North Pond Toe Drain had elevated concentrations of TSS, sulfate, biological oxygen demand (BOD), iron, manganese, and aluminum when compared to the other two effluents; however, for the majority of parameters, concentrations in the North Pond Toe Drain were lower than those measured in the other sources.

4.0 INTERIM PHASE OPERATING CONDITION

Interim operating conditions and discharge configurations will exist at the Station during the closure activities between October 2015 and April 2018.

4.1 Interim Phase Process Flow

Due to the transitional nature of the construction activities, process flow water routing for the North Ash Pond, West Ash Pond, East Ash Pond, Metals Pond, and the Stormwater Management Pond will vary as a result of the construction activities. These transitions in process water routing are grouped into two stages. Stage I includes the clean-closure of the eastern portion of the West Ash Pond and construction of the Low-volume Waste Pond (approximately until January 1, 2016). Stage II includes process water routing through construction of the cap during in-place closure activities for the North and East Ash Ponds.

The Stage I interim discharge configuration shown on Drawing 4 represents the time period covering the West Ash Pond clean-closure and re-purposing construction activities. These routing conditions are expected to be in place from the date for the re-routing of the discharge from the Stormwater Management Pond directly to outfall 002 (pending DEQ concurrence with the Notice of Planned Changes) through the end of January 2016, or until the new Low-volume Waste Pond is placed on line.

Prior to reissuance of the VPDES permit, contact stormwater from the West Ash Pond will be routed to a pre-treatment system for solids removal prior to placement in the North Ash Pond. This treatment and routing of West Ash Pond contact stormwater is consistent with what is allowed under the current permit. Consequently, Dominion will be submitting a separate Notice of Planned Changes to provide additional information and seek DEQ concurrence that the activity may be carried out under the existing permit.

As part of the permit reissuance process, Dominion would like to add outfall 002 (directly or indirectly via the Stormwater Management Pond) and outfall 003 as additional alternative locations for the discharge of the West Ash Pond contact stormwater. In all cases, the contact stormwater would be pre-treated for solids removal, with additional enhanced treatment as needed to ensure compliance with water quality standards and permit limits.

Non-contact construction stormwater from the West Ash Pond area will be routed for discharge under a VSMP permit. In addition, outfall 204 from the Stormwater Management Pond will be re-routed from the West Ash Pond directly to permitted outfall 002, with pre-treatment for solids removal (pending DEQ concurrence under a separate Notice of Planned Changes). The remaining source waters and discharge systems are not expected to change during the Stage I construction activities.

Specific operational descriptions for the outfalls that will be affected by the Stage I construction activities during the interim period are presented in the following sections and estimated flows for the interim phase operations (outfalls that will be affected by the interim operations) are summarized in the following table. In issuing the current VPDES permit, DEQ considered the North and West Ash Pond discharges to be substantially identical and assigned wasteload allocations based on the combined discharge flow. DEQ may want to permit the discharges that will result from the ash pond closure project in a similar manner. Consequently, we are providing the individual process wastewater flows for each outfall without contact stormwater, and the combined process water discharge flows for all three outfalls including contact stormwater. It should be noted that the contact stormwater will be generated and discharged on an intermittent basis as dictated by climatic conditions.

Stage I Outfall/Pond	**Water Type**	**Without Contact Stormwater**		**Combined Discharge Flows Including Contact Stormwater**	
		Avg. Flow (MGD)	**Max. Flow (MGD)**	**Avg. Flow (MGD)**	**Max. Flow (MGD)**
002 (SWMP)	CPSW	>1.26	>1.26	1.53	4.2912
004 (North Ash Pond)	CPSW	0.204	0.4090		
Metals Pond	CPSW discharge eliminated after one-time decant for clean closure. Decant water re-routed to treatment system with final discharge via Outfall 002 or 004.				

Note: MGD = million gallons per day
CPSW = commingled process and stormwater
SWMP = Stormwater Management Pond

The Stage II interim discharge configuration as shown on Drawing 5 represents the time period covering the North and East Ash Pond construction activities. The routing conditions are expected to be in place from the date the Low-volume Waste Pond (former West Ash Pond) is on line through April 17, 2018, or until the North and East Ash Pond closure activities are completed. As presented, contact stormwater and dewatering water from the North and East Ash Ponds will be routed to a pre-treatment system (enhanced treatment if needed) prior to discharge via one or more of the existing permitted outfalls (002, 003, 004, the Low-volume Waste Pond, or the Stormwater Management Pond). Non-construction stormwater from the North and East Ash Pond construction areas will be routed for discharge under a VSMP permit. In addition, outfall 204 from the Stormwater Management Pond will be re-routed to the Low-volume Waste Pond to outfall 002. The Metals Pond and its internal outfall (outfall 202) will be decommissioned, and the remaining systems are not expected to change during the Stage II construction activities.

Specific operational descriptions for the outfalls that will be affected by the Stage II construction activities during the interim period are presented in the following sections, and estimated flows for the interim phase operations (outfalls that will be affected by the interim operations) are summarized in the following table. As done with the Stage I discharges, we are providing the individual process wastewater flows for each outfall without contact stormwater, and the combined process water discharge flows for all three outfalls including contact stormwater.

Stage II Outfall/Pond	Water Type	Without Contact Stormwater		Combined Discharge Flows Including Contact Stormwater	
		Avg. Flow (MGD)	Max. Flow (MGD)	Avg. Flow (MGD)	Max. Flow (MGD)
002 (Low-volume Waste Pond)	CPSW	1.53(1)	4.2912(2)	6.79	11.5512
204 (SWMP)	CPSW	>1.26(1)	>1.26(2)		
003 (East Ash Pond)	CPSW	SW(1)	SW(2)		
004 (North Ash Pond)	CPSW	SW(1)	SW(2)		

Note: MGD = million gallons per day
CPSW = commingled process and stormwater
SWMP = Stormwater Management Pond
SW = stormwater
(1) = flow may increase by 4.0 MGD if treatment system discharge is routed to this outfall
(2) = flow may increase by 6.0 MGD if treatment system discharge is routed to this outfall

4.1.1 Outfall 202 - Metals Pond

Dominion expects to commence with closure of the Metals Pond concurrently with the West Ash Pond closure activities in October 2015, with closure activities completed on or about March 1, 2016.

Closure of the Metals Pond is proposed through material removal and disposal at a permitted waste disposal facility. Contact stormwater generated during closure activities will either be routed to the re-purposed West Ash Pond (i.e., new Low-volume Waste Pond) or to the North Ash Pond (pending DEQ concurrence with the Notice of Planned Changes). Non-contact stormwater will be discharged under a VSMP permit after decommissioning activities are complete until the area achieves stabilization. Depending on site conditions, additional options to manage contact stormwater are proposed in the following table:

Metals Pond Water Source	Metals Pond Water Management Option
Contact stormwater	Directly to a pre-treatment system with discharge of the treated water via outfall 004
	Directly to a pre-treatment system with discharge of the treated water via outfall 003
	Directly to a pre-treatment system with discharge of the treated water to the Stormwater Management Pond and discharge via outfall 002
	Directly to a pre-treatment system with discharge of the treated water to the Low-volume Waste Pond and discharge via outfall 002 (former West Ash Pond)

4.1.2 Outfall 002- West Ash Pond

Closure activities for the West Ash Pond are expected to begin on or before October 19, 2015, with pre-construction decanting completed by that date. As part of the closure activities, Dominion plans to clean-close the western section of the pond via CCR removal. The remaining eastern section of the pond will also be clean-closed via CCR removal, with this area re-purposed as the lined Low-volume Waste Pond. Closure and re-purposing of the eastern portion of the West Ash Pond is expected to be complete by January 1, 2016. The closure of the western area of the West Ash Pond is expected to be completed on or before April 17, 2018.

In preparation for, and during, construction, contact water will be discharged under the VPDES permit as presented herein, and non-contact construction stormwater will be discharged under a VSMP permit until final site stabilization is achieved. The influent water from the Stormwater Management Pond will be pre-treated (*i.e.*, filtered) and routed directly to outfall 002 during construction, or to the North Ash Pond's outfall 004. The influent water from the Metals Pond via outfall 202 will be eliminated.

Following re-routing of the Stormwater Management Pond discharge, contact stormwater from the West Ash Pond will be routed to the North Ash Pond with pre-treatment (*i.e.*, filtering) until approximately January 1, 2016 (Stage I activity). Contact stormwater from the remaining western portion of the West Ash Pond during clean-closure will be routed to the re-purposed West Ash Pond (*i.e.*, new Low-volume Waste Pond) with pre-treatment (*i.e.*, filtering). Non-contact stormwater will be discharged under a VSMP permit after CCR removal until the area achieves stabilization. Depending on site conditions, additional options to manage contact stormwater are proposed in the following table:

West Ash Pond Water Source	West Ash Pond Water Management Option
Contact stormwater	Directly to a pre-treatment system with discharge of the treated water via outfall 004
	Directly to a pre-treatment system with discharge of the treated water via outfall 003
	Directly to a pre-treatment system with discharge of the treated water to the Stormwater Management Pond and discharge via outfall 002
	Directly to a pre-treatment system with discharge of the treated water to the Low-volume Waste Pond and discharge via outfall 002 (former West Ash Pond)

4.1.3 Outfall 003 - East Ash Pond

Closure activities for the East Ash Pond are expected to begin on or before March 1, 2016, with pre-construction dewatering initiated by January 1, 2016. Closure activities are expected to be completed on or before April 17, 2018. In preparation for, and during, construction of the closure cap, contact water and dewatering water will be discharged under the VPDES permit as presented herein, and non-contact construction stormwater will be discharged under a VSMP permit until final site stabilization is achieved.

As with the North Ash Pond, dewatering will be required to stabilize the materials for the required closure activities. It is expected that the dewatering activities will be performed with a combination of gravity-based decantation and mechanically assisted dewatering means, possibly including well points and dewatering trenches. Once the East Ash Pond materials are sufficiently dewatered to support construction activities, the East Ash Pond will be closed in place by capping in accordance with solid waste regulatory requirements. The flow from the proposed horizontal toe drains on the East Ash Pond will be routed to the existing Stormwater Management Pond and discharged through outfall 002 in the same manner as the existing toe drains from the North Ash Pond.

Outfall 003 is expected to continue receiving non-contact stormwater discharges from the East Ash Pond until January 1, 2016, at which time dewatering water is expected to be generated. Dewatering water will be pre-treated (filtered for TSS control) before being routed to the new, lined, Low-volume Waste Pond (former West Ash Pond) and discharged via outfall 002. Depending on site conditions, additional options to manage contact stormwater and dewatering water are proposed in the following table:

East Ash Pond Water Source	East Ash Pond Water Management Option
Commingled Process and Stormwater	Directly to a pre-treatment system with discharge of the treated water via outfall 004
	Directly to a pre-treatment system with discharge of the treated water via outfall 003
	Directly to a pre-treatment system with discharge of the treated water to the Stormwater Management Pond and discharge via outfall 002
	Directly to a pre-treatment system with discharge of the treated water to the Low-volume Waste Pond and discharge via outfall 002 (former West Ash Pond)

4.1.4 Outfall 204 - Stormwater Management Pond

Prior to the initiation of the closure activities for the West Ash Pond, outfall 204 from the Stormwater Management Pond will be re-routed from the West Ash Pond directly to outfall 002 or outfall 004. It is expected that the Stormwater Management Pond will discharge directly via outfall 002 or outfall 004 until the Low-volume Waste Pond is placed on line and connected to outfall 002, at which time outfall 204 will be re-activated with the discharge directed to the Low-volume Waste Pond.

4.1.5 Outfall 004 - North Ash Pond

Closure activities for the North Ash Pond are expected to begin on or before March 1, 2016, with pre-construction dewatering initiated by January 1, 2016. Closure activities are to be completed on or before April 17, 2018. In preparation for, and during, construction of the closure cap, contact water and dewatering water will be discharged under the VPDES permit as presented herein, and non-contact construction stormwater will be discharged under a VSMP permit until final site stabilization is achieved.

Dewatering the CCR in the North Ash Pond will be accomplished through a combination of gravity-based decantation and mechanically assisted dewatering means, possibly including additional well points and dewatering trenches. Once the North Ash Pond materials are sufficiently dewatered to support construction activities, the North Ash Pond will be closed in place by capping.

Outfall 004 will continue to receive impoundment decant water from the North Ash Pond until January 1, 2016, at which time dewatering water is expected to be generated. Dewatering water will be pre-treated (filtered for TSS control) before being routed to the new, lined, Low-volume Waste Pond (former West Ash Pond) and discharged via outfall 002. Depending on site conditions, additional options to manage contact stormwater and dewatering water are proposed in the following table. Treatment will be provided as necessary to ensure compliance with Virginia Surface Water Quality Standards following treatment.

North Ash Pond Water Source	North Ash Pond Water Management Options
Commingled Process and Stormwater	Directly to a pre-treatment system with discharge of the treated water via outfall 004
	Directly to a pre-treatment system with discharge of the treated water via outfall 003
	Directly to a pre-treatment system with discharge of the treated water to the Stormwater Management Pond and discharge via outfall 002
	Directly to a pre-treatment system with discharge of the treated water to the Low-volume Waste Pond and discharge via outfall 002 (former West Ash Pond)

4.2 Interim Period Conceptual Engineering Report

Based on the characteristics of the expected source waters that will be generated during the transitional construction period as represented by the results summarized in Table 2, a conceptual pre- and enhanced treatment system has been designed to attenuate elevated concentrations of selected analytes. The analytes of primary concern are TSS and certain metals.

As proposed, the pre-treatment system is designed to be flexible in operation such that wastewaters can effectively managed and treated separately or in combination to the level necessary for compliance with permit requirements and surface water quality standards. The enhanced treatment system will be constructed to manage up to 4.0 MGD on average, with a maximum capacity of 6.0 MGD, and will be operated as needed based on the characteristics of the source water(s) being managed at the time of the discharge. The conceptual pre-treatment system design has provisions for TSS control (filtration) for various source waters during construction as a minimum control measure. More advanced treatment will be used in conjunction with filtration as needed to meet VPDES permit limits.

4.2.1 Commingled Process and Stormwater

At this time, it is expected that TSS controls (filtration) will be sufficient to meet permit limits for the commingled contact stormwater, dewatering water, and toe drain water generated during the Stages I and II construction activities. Accordingly, these source waters will be routed to one or more water treatment units for TSS control. Additional enhanced treatment would be utilized with these wastewaters if determined necessary to meet limits.

4.2.2 Ash Dewatering Water

The enhanced treatment option for source water generated during dewatering of the CCR for the North and East Ash Ponds during closure activities includes routing the source water to a mixing tank (Source Water) and then decanting to a polymerization tank for flocculent formation using gypsum, or National Science Foundation (NSF) certified anionic and/or cationic polymers, and/or coagulants as needed to attenuate the elevated TSS concentrations.

The treated source water will then be routed to a primary settling tank where settled/underflow solids from primary settling will be recovered, dewatered, and disposed of off-site in a solid waste facility permitted to accept the materials.

The overflow will decant to a pH buffering/aeration tank to assist with metals removal, if required, then will decant to a secondary settling tank with pH buffering as needed. The settled/underflow solids from the secondary settling tank will be recovered, dewatered, and disposed of off-site in a solid waste facility permitted to accept the materials.

The decant water from the secondary settling tank will be routed to a pH neutralization tank (pH buffering as needed) where it will then be discharged to one of the permitted outfalls or the Stormwater Management Pond.

To verify the operational efficiency of the pre-treatment system, the system will be monitored using a combination of monitoring equipment for turbidity (as a surrogate for TSS) and pH, with additional sampling performed between Stages I and II, and at the outfall(s), for constituents as required for VPDES permit compliance.

Additional or alternative enhanced treatment methods may be employed if determined necessary.

5.0 FINAL OPERATING CONDITION

The final operating conditions and discharge configurations that will exist at the Station following closure activities are described in this section. It is expected that final conditions for the Station will be in place no later than April 2018; however, certain outfalls will reach a final operating configuration prior to April 2018 as the closure activities are progressively completed. Details for the final operating configuration are summarized in the following sections.

5.1 Final Phase Process Flow

A conceptual process flow diagram for the post-construction water management configuration is presented on the One-line Diagram in Appendix III. As presented, since no additional CCR management water will be generated at that time, it is expected that the post-construction VPDES permit will no longer require any pre-treatment to meet permit limitations.

The closed North and East Ash Ponds, the western area of the former West Ash Pond, the decommissioned Metals Pond area, and the area inside of the Flood Wall will be operated as No Exposure areas with non-contact, no exposure stormwater discharges to new surface water outfalls (007 and 008). The STP discharge will continue to be routed to the Stormwater Management Pond via outfall 203, which in turn will be routed to the Low-volume Waste Pond via outfall 204. The Low-volume Waste Pond will discharge via outfall 002.

Specific operational descriptions for the outfalls that will be affected by the construction activities following completion of construction activities are presented in the following sections, and estimated flows for Outfall 002 during the post closure final phase operations are summarized in the following table.

Outfall/Pond	Water Type	Avg. Flow (MGD)	Max. Flow (MGD)
002 (Low-volume Waste Pond)	CPSW	1.53	4.2912

Note: MGD = million gallons per day
CPSW = commingled process and stormwater

5.1.1 Outfall 008 - North Ash Pond

Following the completion of closure activities on or before April 17, 2018, the North Ash Pond will be maintained as a No Exposure industrial area, with the non-contact stormwater discharged via a new surface water outfall (proposed outfall 008) on the southern side of the closed East Ash Pond (see Drawing 6). Additionally, after closure, the flow from the existing embankment toe drains on the North Ash Pond will continue to be routed to the existing Stormwater Management Pond for treatment and discharge through outfall 002.

5.1.2 Outfall 007 - East Ash Pond

Following the completion of closure activities on or before April 17, 2018, the East Ash Pond will be maintained as a No Exposure industrial area, with the non-contact stormwater discharged via a new surface water outfall (proposed outfall 008) on the southern side of the closed East Ash Pond (see Drawing 6). A toe drain will be installed during closure of the pond, and water that is captured by this system will be directed to the existing Stormwater Management Pond for treatment and discharge through Outfall 002.

5.1.3 Outfall 002 - Low-volume Waste Pond

Following removal of the CCR, the re-purposed eastern portion of the former West Ash Pond area will be lined with a 60-mil flexible Ethylene Propylene Diene Monomer (EPDM) liner system and placed back in service on or before January 1, 2016, as the Low-volume Waste Pond with a discharge via Outfall 002.

Following the completion of the remaining West Ash Pond closure activities (western portion) on or before April 17, 2018, the clean-closed area will be maintained as a No Exposure industrial area, with the non-contact stormwater discharged under sheet flow conditions.

5.1.4 Outfall 204 - Stormwater Management Pond

Following closure of the West Ash Pond and construction of the new Low-volume Waste Pond with its connection to outfall 002, outfall 204 will be re-routed to the Low-volume Waste Pond.

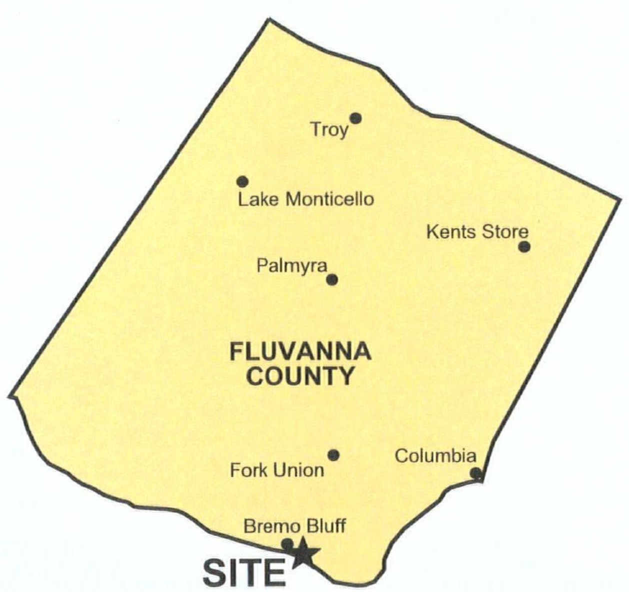
5.1.5 Metals Pond

Following completion of the Metals Pond closure activities on or before March 1, 2016, outfall 202 will be eliminated and the closed area will be maintained as a No Exposure industrial area, with the non-contact stormwater discharged under sheet flow conditions.

DRAWINGS

DOMINION
BREMO POWER STATION CCR IMPOUNDMENT CLOSURE VPDES PERMIT APPLICATION AMENDMENT

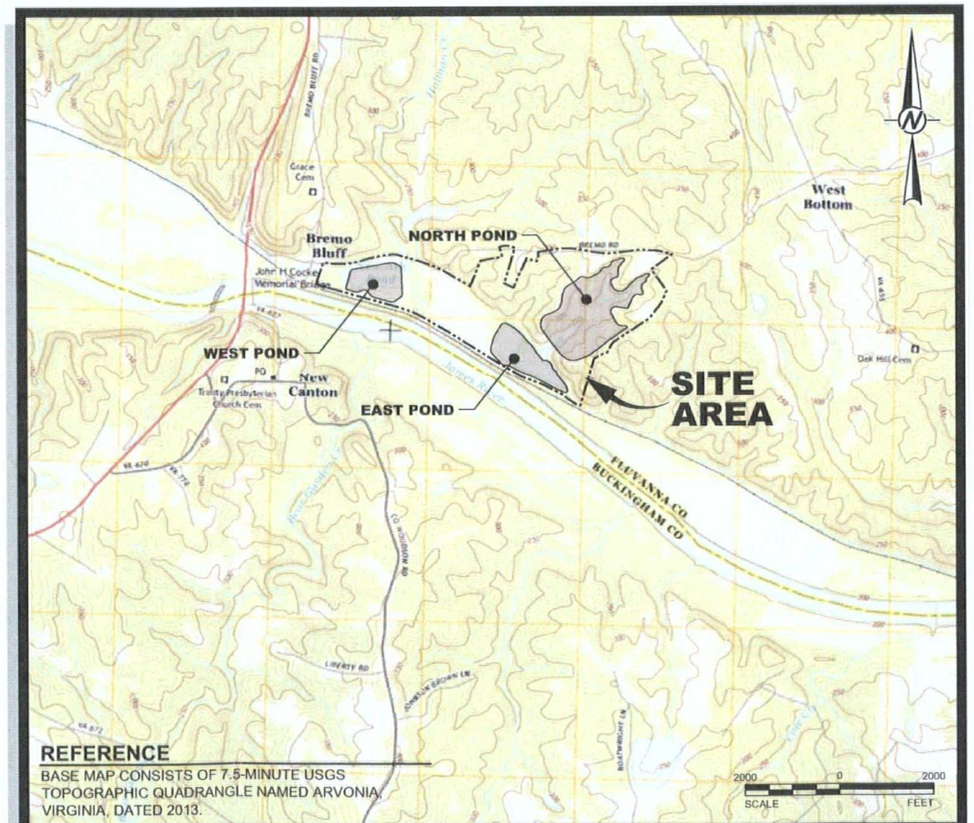
FORK UNION MAGISTERIAL DISTRICT
FLUVANNA COUNTY, VIRGINIA
JULY 2015



SITE ADDRESS:
1038 BREMO ROAD
BREMO BLUFF, VA 23022

NOT TO SCALE

VICINITY MAP



SITE LOCATION MAP

SHEET LIST TABLE

Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING OUTFALL LOCATION MAP
3	PROCESS FLOW DIAGRAM (EXISTING CONDITIONS)
4	PROCESS FLOW DIAGRAM (STAGE I CONSTRUCTION) 2015 TIME FRAME
5	PROCESS FLOW DIAGRAM (STAGE II CONSTRUCTION) 2016-2018
6	PROPOSED OUTFALL LOCATION MAP

REFERENCE:

1. EXISTING CONDITIONS COMPILED FROM:
   a. AERIAL IMAGING PREPARED BY McKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
   b. BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.

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PREPARED BY: Golder Associates

PREPARED FOR: Dominion

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0						

PROJECT: DOMINION BREMO POWER STATION CCR IMPOUNDMENT CLOSURE VPDES PERMIT APPLICATION AMENDMENT

TITLE: **COVER SHEET**

PROJECT No.		15-20347	FILE No.	1520347H01
DESIGN	JRD	06/27/15	SCALE	AS SHOWN
CADD	ATN	06/27/15	**DRAWING 1**	
CHECK	ATN	06/30/15		
REVIEW	JRD	06/30/15		

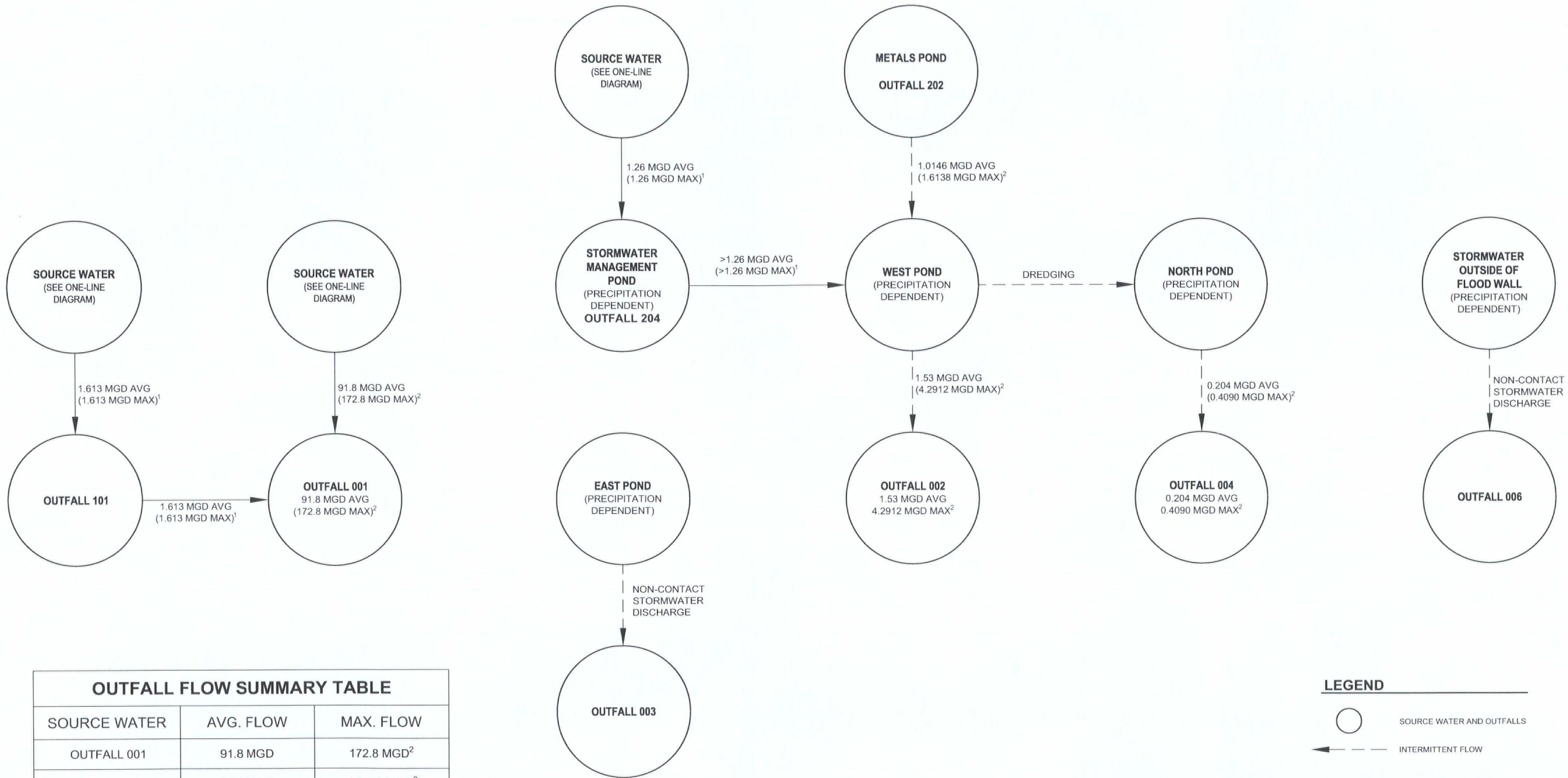
REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW
0						

PROJECT
DOMINION
BREMO POWER STATION
CCR IMPOUNDMENT CLOSURE
VPDES PERMIT APPLICATION AMENDMENT

TITLE
EXISTING OUTFALL LOCATION MAP

Golder Associates

PROJECT No.		15-20347	FILE No. 1520347H02
DESIGN	JRD	06/27/15	SCALE AS SHOWN
CADD	ATN	06/27/15	
CHECK	ATN	06/30/15	DRAWING 2
REVIEW	JRD	06/30/15	



OUTFALL FLOW SUMMARY TABLE

SOURCE WATER	AVG. FLOW	MAX. FLOW
OUTFALL 001	91.8 MGD	172.8 MGD[2]
OUTFALL 002	1.53 MGD	4.2912 MGD[2]
OUTFALL 004	0.204 MGD	0.4090 MGD[2]

NOTES:

1. WHERE FLOWS ARE LIMITED BY SYSTEM DESIGN, MAXIMUM FLOWS EQUAL THE AVERAGE FLOWS.
2. IF THE MAXIMUM FLOWS ARE LISTED IN THE PERMIT, THOSE FLOWS WERE USED.
3. WHERE FLOWS ARE NOT LIMITED BY SYSTEM DESIGN AND MAXIMUM FLOWS WERE NOT LISTED IN THE PERMIT, MAXIMUM FLOWS WERE CALCULATED BY MULTIPLYING THE AVERAGE FLOWS BY A FACTOR OF 1.5.
4. FLOWS FROM OUTFALL 101 ARE INCLUDED IN THE FLOWS IDENTIFIED FOR OUTFALL 001.
5. FLOWS FROM THE STORMWATER MANAGEMENT POND ARE INCLUDED IN THE FLOWS IDENTIFIED FOR THE WEST POND.
6. MAXIMUM FLOWS FROM THE NORTH POND WERE ASSUMED TO BE THE MAXIMUM FLOWS FROM THE WEST POND DURING DREDGING.

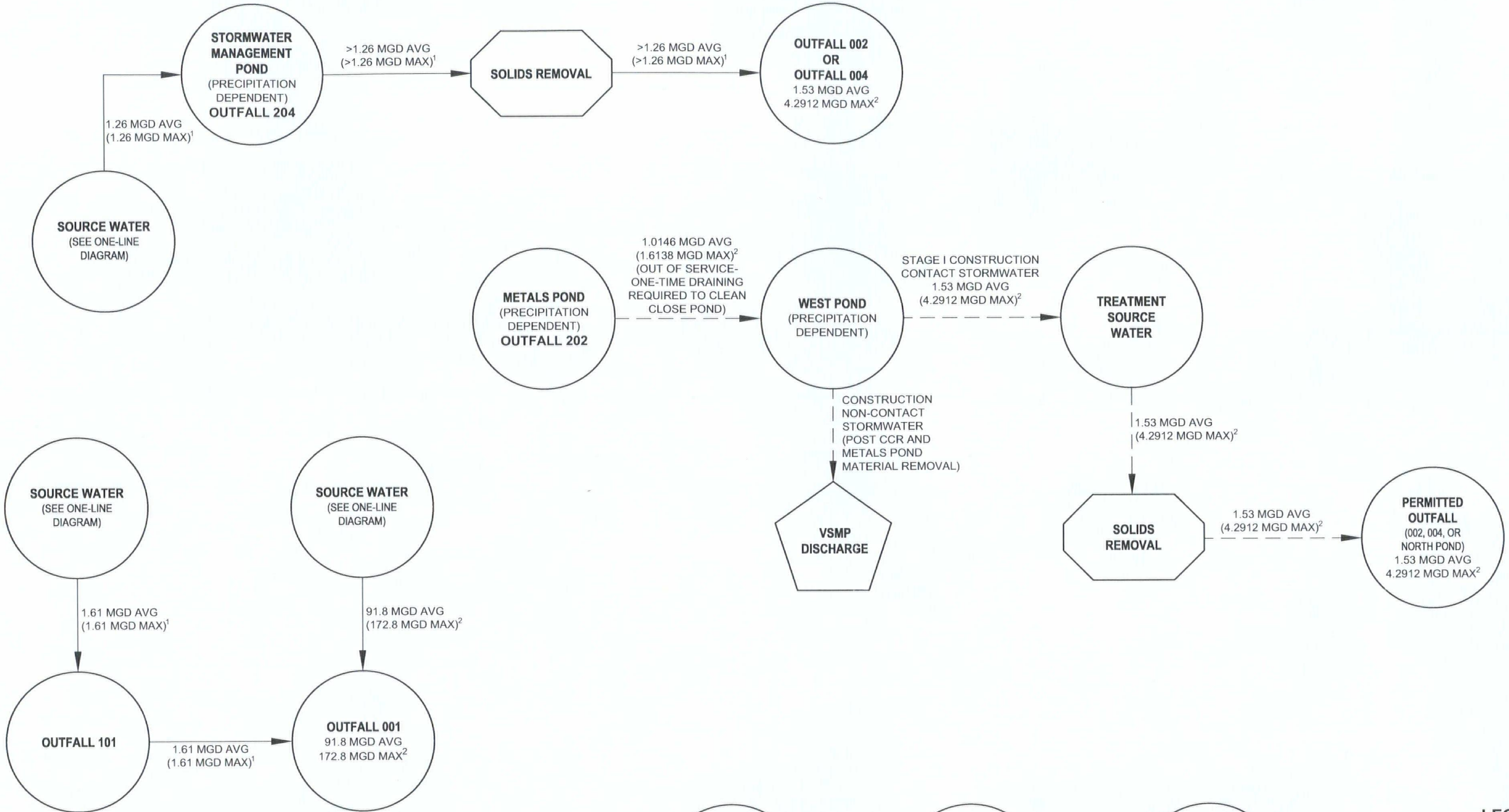
REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW

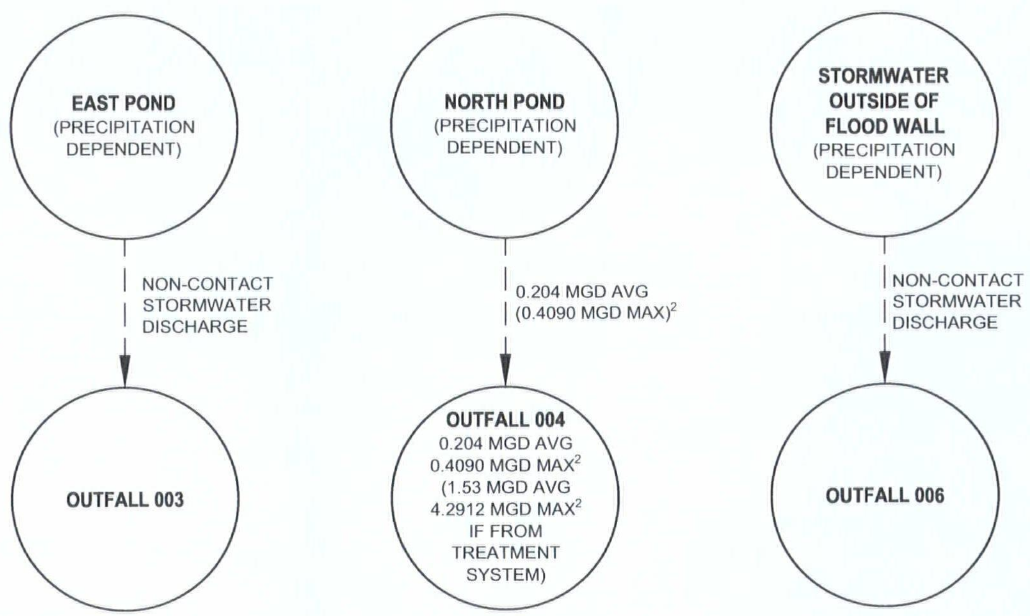
PROJECT
DOMINION
BREMO POWER STATION
CCR IMPOUNDMENT CLOSURE
VPDES PERMIT APPLICATION AMENDMENT

TITLE
PROCESS FLOW DIAGRAM (EXISTING CONDITIONS)

Golder Associates

PROJECT No.		15-20347	FILE No.	1520347H03-05
DESIGN	JRD	06/27/15	SCALE	AS SHOWN
CADD	ATN	06/27/15	DRAWING 3	
CHECK	ATN	06/30/15		
REVIEW	JRD	06/30/15		





OUTFALL FLOW SUMMARY TABLE

SOURCE WATER	AVG. FLOW	MAX. FLOW
OUTFALL 001	91.8 MGD	172.8 MGD^2
OUTFALL 002	1.53 MGD	4.2912 MGD^2
OUTFALL 004	0.204 MGD/1.53 MGD	0.4090 MGD^2/4.2912 MGD^2

NOTES:
1. WHERE FLOWS ARE LIMITED BY SYSTEM DESIGN, MAXIMUM FLOWS EQUAL THE AVERAGE FLOWS.
2. IF THE MAXIMUM FLOWS ARE LISTED IN THE PERMIT, THOSE FLOWS WERE USED.
3. WHERE FLOWS ARE NOT LIMITED BY SYSTEM DESIGN AND MAXIMUM FLOWS WERE NOT LISTED IN THE PERMIT, MAXIMUM FLOWS WERE CALCULATED BY MULTIPLYING THE AVERAGE FLOWS BY A FACTOR OF 1.5.
4. FLOWS FROM OUTFALL 101 ARE INCLUDED IN THE FLOWS IDENTIFIED FOR OUTFALL 001.
5. FLOWS FROM THE METALS POND ARE INCLUDED IN THE FLOWS IDENTIFIED FOR THE WEST POND.
6. FLOWS FROM OUTFALL 003 AND 004 WILL INCREASE AS SHOWN IF FLOWS FROM THE TREATMENT SYSTEM ARE INCLUDED.

LEGEND

- VIRGINIA STORMWATER MANAGEMENT PROGRAM
- ENHANCED TREATMENT (AS NEEDED)
- SOURCE WATER AND OUTFALLS
- SOLIDS REMOVAL
- INTERMITTENT FLOW

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW

PROJECT
DOMINION
BREMO POWER STATION
CCR IMPOUNDMENT CLOSURE
VPDES PERMIT APPLICATION AMENDMENT

TITLE
PROCESS FLOW DIAGRAM (STAGE I CONSTRUCTION) 2015 TIME FRAME

Golder Associates

PROJECT No.		15-20347	FILE No.	1520347H03-05
DESIGN	JRD	06/27/15	SCALE	AS SHOWN
CADD	ATN	06/27/15		
CHECK	ATN	06/30/15	DRAWING 4	
REVIEW	JRD	06/30/15		

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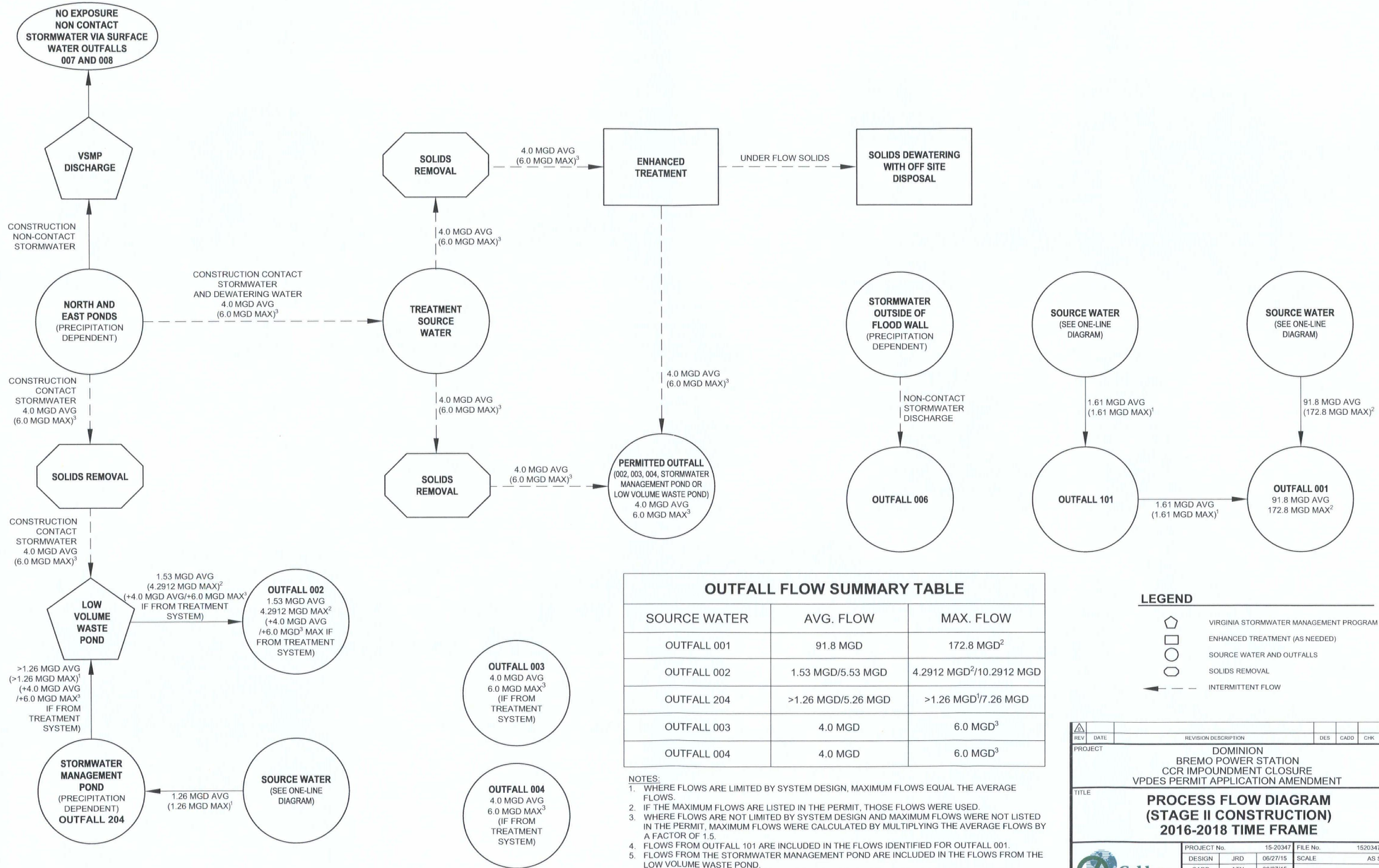

OUTFALL FLOW SUMMARY TABLE

SOURCE WATER	AVG. FLOW	MAX. FLOW
OUTFALL 001	91.8 MGD	172.8 MGD[2]
OUTFALL 002	1.53 MGD/5.53 MGD	4.2912 MGD[2]/10.2912 MGD
OUTFALL 204	>1.26 MGD/5.26 MGD	>1.26 MGD[1]/7.26 MGD
OUTFALL 003	4.0 MGD	6.0 MGD[3]
OUTFALL 004	4.0 MGD	6.0 MGD[3]

NOTES:
1. WHERE FLOWS ARE LIMITED BY SYSTEM DESIGN, MAXIMUM FLOWS EQUAL THE AVERAGE FLOWS.
2. IF THE MAXIMUM FLOWS ARE LISTED IN THE PERMIT, THOSE FLOWS WERE USED.
3. WHERE FLOWS ARE NOT LIMITED BY SYSTEM DESIGN AND MAXIMUM FLOWS WERE NOT LISTED IN THE PERMIT, MAXIMUM FLOWS WERE CALCULATED BY MULTIPLYING THE AVERAGE FLOWS BY A FACTOR OF 1.5.
4. FLOWS FROM OUTFALL 101 ARE INCLUDED IN THE FLOWS IDENTIFIED FOR OUTFALL 001.
5. FLOWS FROM THE STORMWATER MANAGEMENT POND ARE INCLUDED IN THE FLOWS FROM THE LOW VOLUME WASTE POND.
6. FLOWS FROM OUTFALL 002, 003, AND 004 WILL INCREASE AS SHOWN IF FLOWS FROM THE TREATMENT SYSTEM ARE INCLUDED.

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW

PROJECT
DOMINION
BREMO POWER STATION
CCR IMPOUNDMENT CLOSURE
VPDES PERMIT APPLICATION AMENDMENT

TITLE
PROCESS FLOW DIAGRAM (STAGE II CONSTRUCTION) 2016-2018 TIME FRAME

PROJECT No.		15-20347	FILE No. 1520347H03-05
DESIGN	JRD	06/27/15	SCALE AS SHOWN
CADD	ATN	06/27/15	
CHECK	ATN	06/30/15	DRAWING 5
REVIEW	JRD	06/30/15	

Golder Associates

REV	DATE	REVISION DESCRIPTION	DES	CADD	CHK	RVW

PROJECT

DOMINION
BREMO POWER STATION
CCR IMPOUNDMENT CLOSURE
VPDES PERMIT APPLICATION AMENDMENT

TITLE

PROPOSED OUTFALL LOCATION MAP

Golder Associates

PROJECT No.		15-20347	FILE No.	1520347H03
DESIGN	JRD	06/27/15	SCALE	AS SHOWN
CADD	ATN	06/27/15		
CHECK	ATN	06/30/15	**DRAWING 6**	
REVIEW	JRD	06/30/15		

TABLES

Table 1
Summary of Process Water Characterization Analyses
Bremo Power Station

Sample Date	Location	Orignal list													EPA Form C					DEQ Attachment A														
		Alkalinity	Fluoride	Nitrate/Nitrite	Oil & Grease	Radium 226 & 228	Ammonia	Sulfate	TDS	BOD	TSS	Metals	Hex. Chromium	Mercury	COD	TOC	Bromide	TKN	Phosphorous, Total	Metals	Mercury, dissolved	Hex. Chromium, dissolved	Pesticides/PCBs	Base Neutral Extractables	Volatiles	Acid Extractables	Ammonia as NH3-N	Chloride	FIELD - Total Residual Chlorine	Cyanide, Free	E. Coli / Enterococcus	Sulfide, dissolved	Tributyltin	Hardness
		E310.2	E300	E353.2	E1664B	E903.1/SW9320	EPA350.1	E300	SM2540D	SM5210B	SM2540D	SW6010C/SW6020A	SM3500	SW7470	SM5220	SM5310C	EPA300	EPA351.2	SM4500	EPA200.7/200.8	EPA245.1		EPA625/622/614	EPA625	EPA624	EPA625/ASTM D7065-06	EPA350.1	EPA300	FIELD	SM4500	Colilert 18 QT/Enterolert	HACH8131		SM2340B
3/31/2015	PZ-1 (North Pond)	X	X	X	X	X	X	X	X	X	X	X		X														X						
	PZ-2 (East Pond)	X	X	X	X	X	X	X	X	X	X	X		X														X						
4/15/2015	PZ-1 (North Pond)	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X									X						X
	PZ-2 (East Pond)	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X									X						X
	Metals Pond			X	X	X	X	X	X		X	X	X	X			X	X	X									X						
	SWM Pond			X	X	X	X	X	X		X	X	X	X			X	X	X									X						
	North Pond Toe Drain	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X									X						X
5/21/2015	PZ-1 (North Pond)	X	X	X	X	X		X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	PZ-2 (East Pond)	X	X	X	X	X		X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Metals Pond	X	X	X	X	X		X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	SWM Pond	X	X	X	X	X		X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6/4/2015	PZ-1 (North Pond)														X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	PZ-2 (East Pond)														X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Metals Pond	X	X			X				X					X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	SWM Pond	X	X			X				X					X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	North Pond Toe Drain	X	X			X				X					X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6/16/2015	North Pond Toe Drain			X	X			X	X		X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			**Ash Dewatering Water**		**Toe Drain**	**Commingled Process and Stormwater**	
Parameter	Sample Date	Method					
Bacteria (mpn/100ml)							
Entrococci	05/21/2015	Enterolert	8	18	--	156	8
Entrococci	06/04/2015	Enterolert	34	73	1	921	12
Entrococci	06/16/2015	Enterolert	--	--	< 1	--	--
Escherichia coli	01/20/2015	SM9223F	--	--	--	--	30
Escherichia coli	05/21/2015	COLILERT-18 QT	< 1	< 1	--	261	4
Escherichia coli	06/04/2015	COLILERT-18 QT	4	< 1	< 1	613	23
Escherichia coli	06/16/2015	COLILERT-18 QT	--	--	< 1	--	--
Dissolved Metals (ug/L)							
Aluminum	01/20/2015	SM3111B	--	--	--	--	< 130
Aluminum	03/31/2015	SW6010C	78.3	61.2	--	--	--
Aluminum	04/15/2015	SW6010C	166	47.8	163	--	--
Aluminum	05/21/2015	E200.7	26.8	20.3	--	< 20.0	28.8
Aluminum	06/04/2015	E200.7	41.4	38.6	< 20.0	< 20.0	< 20.0
Aluminum	06/16/2015	E200.7	--	--	< 20.0	--	--
Antimony	01/20/2015	SM3113B	--	--	--	--	< 1
Antimony	03/31/2015	SW6020A	15.0	21.4	--	--	--
Antimony	04/15/2015	SW6020A	13.7	--	0.378	--	--
Antimony	05/21/2015	E200.8	2.53	11.1	--	< 0.110	0.615
Antimony	06/04/2015	E200.8	3.54	9.41	< 0.110	< 0.110	0.230
Antimony	06/16/2015	E200.8	--	--	< 0.110	--	--
Arsenic	01/20/2015	SM3113B	--	--	--	--	< 2
Arsenic	03/31/2015	SW6010C	103	30.6	--	--	--
Arsenic	04/15/2015	SW6010C	211	69.1	< 6.80	< 6.80	< 6.80
Arsenic	05/21/2015	E200.8	453	604	--	1.89	5.90
Arsenic	05/21/2015	E200.9	--	28.8	--	--	--
Arsenic	06/04/2015	E200.8	318	29.5	< 0.610	2.57	3.18
Arsenic	06/04/2015	E200.9	--	345	--	--	--
Arsenic	06/16/2015	E200.8	--	--	< 0.610	--	--
Barium	01/20/2015	SM3113B	--	--	--	--	39
Barium	03/31/2015	SW6010C	224	617	--	--	--
Barium	04/15/2015	SW6010C	648	788	109	--	--
Barium	05/21/2015	E200.7	637	742	--	55.9	117
Barium	06/04/2015	E200.7	598	629	13.9	47.6	96.8
Barium	06/16/2015	E200.7	--	--	13.7	--	--
Beryllium	01/20/2015	SM3113B	--	--	--	--	< 0.2
Beryllium	03/31/2015	SW6010C	< 0.100	< 0.100	--	--	--
Beryllium	04/15/2015	SW6010C	< 0.100	< 0.100	< 0.100	--	--
Beryllium	05/21/2015	E200.7	< 2.0	< 2.0	--	< 2.0	< 2.0
Beryllium	06/04/2015	E200.7	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Beryllium	06/16/2015	E200.7	--	--	< 2.0	--	--
Boron	03/31/2015	SW6010C	1290	2420	--	--	--
Boron	04/15/2015	SW6010C	2880	2310	390	230	428
Boron	05/21/2015	E200.7	1590	1580	--	229	414
Boron	06/04/2015	E200.7	1700	1610	789	246	258
Boron	06/16/2015	E200.7	--	--	803	--	--
Cadmium	01/20/2015	SM3113B	--	--	--	--	< 0.3
Cadmium	03/31/2015	SW6010C	< 0.360	< 0.360	--	--	--
Cadmium	04/15/2015	SW6010C	< 0.360	< 0.360	< 0.360	< 0.360	< 0.360

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Cadmium	05/21/2015	E200.8	< 2.20	**7.05**	--	< 0.110	< 0.110
Cadmium	06/04/2015	E200.8	**0.120**	**0.125**	< 0.110	< 0.110	< 0.110
Cadmium	06/16/2015	E200.8	--	--	< 0.110	--	--
Calcium	03/31/2015	SW6010C	**53500**	**117000**	--	--	--
Calcium	04/15/2015	SW6010C	**126000**	**142000**	**32100**	**119000**	**36500**
Calcium	05/21/2015	E200.7	**118000**	**115000**	--	**112000**	**34300**
Calcium	06/04/2015	E200.7	**1180**	**110000**	**31400**	**121000**	**29100**
Calcium	06/16/2015	E200.7	--	--	**20800**	--	--
Chromium	01/20/2015	E200.7	--	--	--	--	< 10
Chromium	01/20/2015	SM3113B	--	--	--	--	< 10
Chromium	03/31/2015	SW6010C	< 1.00	**1.05**	--	--	--
Chromium	04/15/2015	SW6010C	**1.15**	< 1.00	< 1.00	< 1.00	< 1.00
Chromium	05/21/2015	E200.8	< 9.00	**223**	--	< 0.450	< 0.450
Chromium	06/04/2015	E200.8	< 0.450	< 4.50	< 0.450	< 0.450	< 0.450
Chromium	06/16/2015	E200.8	--	--	< 0.450	--	--
Chromium (III)	05/21/2015	CALC	< 10	**223**	--	< 10	< 10
Chromium (III)	06/04/2015	CALC	< 10	< 10	< 10	< 10	< 10
Chromium (III)	06/16/2015	CALC	--	--	< 5	--	--
Cobalt	01/20/2015	SM3113B	--	--	--	--	< 0.6
Cobalt	03/31/2015	SW6010C	**1.58**	**3.90**	--	--	--
Cobalt	04/15/2015	SW6010C	**2.62**	**4.55**	< 1.10	--	--
Cobalt	05/21/2015	E200.7	< 2.0	**20.0**	--	< 2.0	< 2.0
Cobalt	06/04/2015	E200.7	< 2.0	**3.4**	< 2.0	< 2.0	< 2.0
Cobalt	06/16/2015	E200.7	--	--	< 2.0	--	--
Copper	01/20/2015	SM3113B	--	--	--	--	**6**
Copper	03/31/2015	SW6010C	**1.82**	**1.91**	--	--	--
Copper	04/15/2015	SW6010C	**2.51**	**2.01**	**2.25**	**4.36**	**4.44**
Copper	05/21/2015	E200.8	< 4.40	**773**	--	**2.29**	**1.51**
Copper	05/21/2015	E200.9	--	**3.5**	--	--	--
Copper	06/04/2015	E200.8	**2.41**	**2.30**	**0.344**	**1.92**	**2.02**
Copper	06/04/2015	E200.9	--	**433**	--	--	--
Copper	06/16/2015	E200.8	--	--	**0.724**	--	--
Hexavalent Chromium	01/20/2015	SM3500-CR-B	--	--	--	--	< 5
Hexavalent Chromium	05/21/2015	SM3500-CR-B	< 5	< 5	--	< 5	< 5
Hexavalent Chromium	06/04/2015	SM3500-CR-B	< 5	< 5	< 5	< 5	< 5
Hexavalent Chromium	06/16/2015	SM3500-CR-B	--	--	< 5	--	--
Iron	01/20/2015	SM3111B	--	--	--	--	**60**
Iron	03/31/2015	SW6010C	**44.8**	**196**	--	--	--
Iron	04/15/2015	SW6010C	**57.4**	< 22.0	**601**	< 22.0	**160**
Iron	05/21/2015	E200.7	< 3.0	< 3.0	--	**7.4**	**4.5**
Iron	06/04/2015	E200.7	**3.0**	< 3.0	**8.9**	< 3.0	< 3.0
Iron	06/16/2015	E200.7	--	--	**5.7**	--	--
Lead	01/20/2015	SM3113B	--	--	--	--	< 1
Lead	03/31/2015	SW6010C	< 3.10	< 3.10	--	--	--
Lead	04/15/2015	SW6010C	< 3.10	< 3.10	< 3.10	< 3.10	< 3.10
Lead	05/21/2015	E200.8	< 3.20	**52.7**	--	< 0.160	< 0.160
Lead	06/04/2015	E200.8	< 0.160	**0.185**	< 0.160	< 0.160	< 0.160
Lead	06/16/2015	E200.8	--	--	< 0.160	--	--
Lithium	03/31/2015	SW6010C	**249**	**305**	--	--	--
Lithium	04/15/2015	SW6010C	**454**	**340**	**5.53**	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Lithium	05/21/2015	SW6010C	--	--	--	< 1.2	< 1.2
Lithium	06/04/2015	SW6010C	**68**	**520**	< 1.2	**370**	< 1.2
Lithium	06/16/2015	SW6010C	--	--	< 1.2	--	--
Magnesium	01/20/2015	SM3111B	--	--	--	--	**4450**
Magnesium	03/31/2015	SW6010C	**14400**	**27300**	--	--	--
Magnesium	04/15/2015	SW6010C	**32600**	**24700**	**13400**	**4240**	**11300**
Magnesium	05/21/2015	E200.7	**25800**	**19800**	--	**4120**	**10600**
Magnesium	06/04/2015	E200.7	**25400**	**22400**	**6640**	**4640**	**8130**
Magnesium	06/16/2015	E200.7	--	--	**6830**	--	--
Manganese	01/20/2015	SM3111B	--	--	--	--	**40**
Manganese	03/31/2015	SW6010C	**358**	**231**	--	--	--
Manganese	04/15/2015	SW6010C	**886**	**438**	**220**	**9.78**	**49.1**
Manganese	05/21/2015	E200.7	**876**	**873**	--	< 2.0	< 2.0
Manganese	06/04/2015	E200.7	**20.5**	**138**	< 2.0	< 2.0	< 2.0
Manganese	06/16/2015	E200.7	--	--	< 2.0	--	--
Mercury	01/20/2015	SM3112B	--	--	--	--	< 0.02
Mercury	03/31/2015	SW7470A	< 0.170	< 0.170	--	--	--
Mercury	04/15/2015	SW7470A	< 0.170	< 0.170	< 0.170	< 0.170	< 0.170
Mercury	05/21/2015	E245.1	< 0.023	< 0.023	--	< 0.023	< 0.023
Mercury	06/04/2015	E245.1	< 0.023	< 0.023	< 0.023	< 0.023	< 0.023
Mercury	06/16/2015	E245.1	--	--	< 0.023	--	--
Molybdenum	01/20/2015	SM3113B	--	--	--	--	**7**
Molybdenum	03/31/2015	SW6010C	**232**	**93.6**	--	--	--
Molybdenum	04/15/2015	SW6010C	**313**	**58.6**	< 2.50	--	--
Molybdenum	05/21/2015	E200.7	**83.9**	< 50.0	--	< 50.0	< 50.0
Molybdenum	06/04/2015	E200.7	**98.5**	< 50.0	< 50.0	< 50.0	< 50.0
Molybdenum	06/16/2015	E200.7	--	--	< 50.0	--	--
Nickel	01/20/2015	SM3113B	--	--	--	--	< 5
Nickel	03/31/2015	SW6010C	**4.49**	**14.2**	--	--	--
Nickel	04/15/2015	SW6010C	**14.6**	**15.3**	**7.10**	**14.4**	**8.60**
Nickel	05/21/2015	E200.8	< 6.40	**187**	--	**9.50**	**1.44**
Nickel	06/04/2015	E200.8	**3.47**	**28.2**	**0.528**	**25.9**	**1.44**
Nickel	06/16/2015	E200.8	--	--	**0.327**	--	--
Potassium	03/31/2015	SW6010C	**9710**	**14200**	--	--	--
Potassium	04/15/2015	SW6010C	**12600**	**15500**	**1850**	--	--
Potassium	05/21/2015	E200.7	**10500**	**14400**	--	**29700**	**3360**
Potassium	06/04/2015	E200.7	**9840**	**14200**	**1010**	**27200**	**3290**
Potassium	06/16/2015	E200.7	--	--	**1010**	--	--
Selenium	01/20/2015	SM3113B	--	--	--	--	< 2
Selenium	03/31/2015	SW6010C	< 5.00	< 5.00	--	--	--
Selenium	04/15/2015	SW6010C	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Selenium	05/21/2015	E200.8	< 13.0	< 19.5	--	**3.36**	< 0.650
Selenium	06/04/2015	E200.8	< 0.650	**7.24**	< 0.650	**5.29**	< 0.650
Selenium	06/16/2015	E200.8	--	--	< 0.650	--	--
Silver	01/20/2015	SM3113B	--	--	--	--	< 0.1
Silver	03/31/2015	SW6020A	< 0.100	< 0.100	--	--	--
Silver	04/15/2015	SW6010C	< 1.90	< 1.90	< 1.90	< 1.90	< 1.90
Silver	05/21/2015	E200.8	< 0.580	< 0.870	--	< 0.029	< 0.029
Silver	06/04/2015	E200.8	< 0.029	< 0.029	< 0.029	< 0.029	< 0.029
Silver	06/16/2015	E200.8	--	--	< 0.029	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Sodium	03/31/2015	SW6010C	**79600**	**12200**	--	--	--
Sodium	04/15/2015	SW6010C	**41800**	**10400**	**20000**	--	--
Sodium	05/21/2015	E200.7	**16100**	**9250**	--	**9620**	**19300**
Sodium	06/04/2015	E200.7	**14400**	**9240**	**21500**	**9580**	**14900**
Sodium	06/16/2015	E200.7	--	--	**21600**	--	--
Sulfide	05/21/2015	H8131	< 6	< 6	--	< 6	< 6
Sulfide	06/04/2015	H8131	< 6	< 6	< 6	< 6	< 6
Sulfide	06/16/2015	H8131	--	--	< 6	--	--
Thallium	01/20/2015	E279.2	--	--	--	--	< 0.3
Thallium	03/31/2015	SW6020A	**0.531**	**0.531**	--	--	--
Thallium	04/15/2015	SW6020A	**0.345**	--	< 0.110	**0.141**	< 0.110
Thallium	05/21/2015	E200.8	< 1.16	**19.3**	--	< 0.058	**0.061**
Thallium	06/04/2015	E200.8	**0.442**	**2.08**	< 0.058	< 0.058	< 0.058
Thallium	06/16/2015	E200.8	--	--	< 0.058	--	--
Vanadium	03/31/2015	SW6010C	**76.1**	**121**	--	--	--
Vanadium	04/15/2015	SW6010C	**88.8**	**186**	< 1.40	--	--
Vanadium	05/21/2015	E200.7	**30.1**	**134**	--	< 2.0	< 2.0
Vanadium	06/04/2015	E200.7	**22.4**	**291**	< 2.0	< 2.0	< 2.0
Vanadium	06/16/2015	E200.7	--	--	< 2.0	--	--
Zinc	01/20/2015	SM3111B	--	--	--	--	< 10
Zinc	03/31/2015	SW6010C	< 3.80	< 3.80	--	--	--
Zinc	04/15/2015	SW6010C	**4.99**	**3.85**	< 3.80	< 3.80	< 3.80
Zinc	05/21/2015	E200.8	< 32.0	**284**	--	**3.70**	**1.90**
Zinc	06/04/2015	E200.8	**2.89**	< 16.0	**2.05**	**4.46**	**1.70**
Zinc	06/16/2015	E200.8	--	--	**7.62**	--	--
PCBs (ug/L)							
Aroclor 1016	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1016	05/21/2015	E608	< 0.03	< 0.03	--	< 0.03	< 0.03
Aroclor 1016	06/04/2015	E608	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Aroclor 1016	06/16/2015	E608	--	--	< 0.03	--	--
Aroclor 1221	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1221	05/21/2015	E608	< 0.2	< 0.2	--	< 0.2	< 0.2
Aroclor 1221	06/04/2015	E608	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Aroclor 1221	06/16/2015	E608	--	--	< 0.2	--	--
Aroclor 1232	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1232	05/21/2015	E608	< 0.02	< 0.02	--	< 0.02	< 0.02
Aroclor 1232	06/04/2015	E608	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Aroclor 1232	06/16/2015	E608	--	--	< 0.02	--	--
Aroclor 1242	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1242	05/21/2015	E608	< 0.05	< 0.04	--	< 0.05	< 0.04
Aroclor 1242	06/04/2015	E608	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Aroclor 1242	06/16/2015	E608	--	--	< 0.04	--	--
Aroclor 1248	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1248	05/21/2015	E608	< 0.05	< 0.05	--	< 0.06	< 0.05
Aroclor 1248	06/04/2015	E608	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1248	06/16/2015	E608	--	--	< 0.05	--	--
Aroclor 1254	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1254	05/21/2015	E608	< 0.04	< 0.04	--	< 0.04	< 0.04
Aroclor 1254	06/04/2015	E608	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04

Table 2
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Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Aroclor 1254	06/16/2015	E608	--	--	< 0.04	--	--
Aroclor 1260	01/20/2015	E608	--	--	--	--	< 0.6
Aroclor 1260	05/21/2015	E608	< 0.04	< 0.03	--	< 0.04	< 0.04
Aroclor 1260	06/04/2015	E608	< 0.03	< 0.04	< 0.03	< 0.04	< 0.04
Aroclor 1260	06/16/2015	E608	--	--	< 0.04	--	--
Pesticides (ug/L)							
4,4-DDD	01/20/2015	E608	--	--	--	--	< 0.057
4,4-DDD	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
4,4-DDD	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
4,4-DDD	06/16/2015	E608	--	--	< 0.005	--	--
4,4-DDE	01/20/2015	E608	--	--	--	--	< 0.057
4,4-DDE	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
4,4-DDE	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
4,4-DDE	06/16/2015	E608	--	--	< 0.005	--	--
4,4-DDT	01/20/2015	E608	--	--	--	--	< 0.057
4,4-DDT	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
4,4-DDT	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
4,4-DDT	06/16/2015	E608	--	--	< 0.005	--	--
Aldrin	01/20/2015	E608	--	--	--	--	< 0.057
Aldrin	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Aldrin	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Aldrin	06/16/2015	E608	--	--	< 0.005	--	--
alpha-BHC	01/20/2015	E608	--	--	--	--	< 0.057
alpha-BHC	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
alpha-BHC	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
alpha-BHC	06/16/2015	E608	--	--	< 0.005	--	--
alpha-Chlordane	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
alpha-Chlordane	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
alpha-Chlordane	06/16/2015	E608	--	--	< 0.005	--	--
alpha-Endosulfan	01/20/2015	E608	--	--	--	--	< 0.057
alpha-Endosulfan	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
alpha-Endosulfan	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
alpha-Endosulfan	06/16/2015	E608	--	--	< 0.005	--	--
Azinphos-methyl	01/20/2015	E622	--	--	--	--	< 1
Azinphos-methyl	05/21/2015	E622	< 2.1	< 2.3	--	< 2.5	< 2.1
Azinphos-methyl	06/04/2015	E622	< 2.3	< 2.5	< 2.0	< 2.0	< 2.1
Azinphos-methyl	06/16/2015	E622	--	--	< 2.1	--	--
beta-BHC	01/20/2015	E608	--	--	--	--	< 0.057
beta-BHC	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
beta-BHC	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
beta-BHC	06/16/2015	E608	--	--	< 0.005	--	--
beta-Endosulfan	01/20/2015	E608	--	--	--	--	< 0.057
beta-Endosulfan	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
beta-Endosulfan	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
beta-Endosulfan	06/16/2015	E608	--	--	< 0.005	--	--
Chlordane	01/20/2015	E608	--	--	--	--	< 0.227
Chlordane	05/21/2015	E608	< 0.222	< 0.202	--	< 0.235	< 0.208

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Chlordane	06/04/2015	E608	< 0.200	< 0.215	< 0.204	< 0.206	< 0.213
Chlordane	06/16/2015	E608	--	--	< 0.206	--	--
Chlorpyrifos	01/20/2015	E622	--	--	--	--	< 0.2
Chlorpyrifos	05/21/2015	E622	< 2.1	< 2.3	--	< 2.5	< 2.1
Chlorpyrifos	06/04/2015	E622	< 2.3	< 2.5	< 2.0	< 2.0	< 2.1
Chlorpyrifos	06/16/2015	E622	--	--	< 2.1	--	--
delta-BHC	01/20/2015	E608	--	--	--	--	< 0.057
delta-BHC	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
delta-BHC	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
delta-BHC	06/16/2015	E608	--	--	< 0.005	--	--
Demeton, Total	01/20/2015	E614	--	--	--	--	< 1
Demeton, Total	05/21/2015	E614	< 0.093	< 0.093	--	< 0.093	< 0.093
Demeton, Total	06/04/2015	E614	< 0.093	< 0.093	< 0.093	< 0.093	< 0.093
Demeton-O	05/21/2015	E622	< 2.1	< 2.3	--	< 2.5	< 2.1
Demeton-O	06/04/2015	E622	< 2.3	< 2.5	< 2.0	< 2.0	< 2.1
Demeton-O	06/16/2015	E622	--	--	< 2.1	--	--
Demeton-S	05/21/2015	E622	< 2.1	< 2.3	--	< 2.5	< 2.1
Demeton-S	06/04/2015	E622	< 2.3	< 2.5	< 2.0	< 2.0	< 2.1
Demeton-S	06/16/2015	E622	--	--	< 2.1	--	--
Diazinon	01/20/2015	E614	--	--	--	--	< 1
Diazinon	05/21/2015	E614	< 0.031	< 0.031	--	< 0.031	< 0.031
Diazinon	05/21/2015	E622	< 2.1	< 2.3	--	< 2.5	< 2.1
Diazinon	06/04/2015	E614	< 0.031	< 0.031	< 0.031	< 0.031	< 0.031
Diazinon	06/04/2015	E622	< 2.3	< 2.5	< 2.0	< 2.0	< 2.1
Diazinon	06/16/2015	E622	--	--	< 2.1	--	--
Dieldrin	01/20/2015	E608	--	--	--	--	< 0.057
Dieldrin	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Dieldrin	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Dieldrin	06/16/2015	E608	--	--	< 0.005	--	--
Endosulfan Sulfate	01/20/2015	E608	--	--	--	--	< 0.057
Endosulfan Sulfate	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Endosulfan Sulfate	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Endosulfan Sulfate	06/16/2015	E608	--	--	< 0.005	--	--
Endrin	01/20/2015	E608	--	--	--	--	< 0.057
Endrin	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Endrin	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Endrin	06/16/2015	E608	--	--	< 0.005	--	--
Endrin Aldehyde	01/20/2015	E608	--	--	--	--	< 0.057
Endrin Aldehyde	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Endrin Aldehyde	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Endrin Aldehyde	06/16/2015	E608	--	--	< 0.005	--	--
gamma-BHC	01/20/2015	E608	--	--	--	--	< 0.057
gamma-BHC	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
gamma-BHC	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
gamma-BHC	06/16/2015	E608	--	--	< 0.005	--	--
Heptachlor	01/20/2015	E608	--	--	--	--	< 0.057
Heptachlor	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Heptachlor	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor	06/16/2015	E608	--	--	< 0.005	--	--
Heptachlor Epoxide	01/20/2015	E608	--	--	--	--	< 0.057
Heptachlor Epoxide	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Heptachlor Epoxide	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Heptachlor Epoxide	06/16/2015	E608	--	--	< 0.005	--	--
Malathion	01/20/2015	E614	--	--	--	--	< 1
Malathion	05/21/2015	E614	< 0.074	< 0.074	--	< 0.074	< 0.074
Malathion	06/04/2015	E614	< 0.074	< 0.074	< 0.074	< 0.074	< 0.074
Malathion	06/16/2015	E614	--	--	< 0.074	--	--
Methoxychlor	01/20/2015	E608	--	--	--	--	< 0.057
Methoxychlor	05/21/2015	E608	< 0.006	< 0.005	--	< 0.006	< 0.005
Methoxychlor	06/04/2015	E608	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Methoxychlor	06/16/2015	E608	--	--	< 0.005	--	--
Parathion	01/20/2015	E614	--	--	--	--	< 1
Parathion	05/21/2015	E614	< 0.038	< 0.038	--	< 0.038	< 0.038
Parathion	06/04/2015	E614	< 0.038	< 0.038	< 0.038	< 0.038	< 0.038
Parathion	06/16/2015	E614	--	--	< 0.038	--	--
Toxaphene	01/20/2015	E608	--	--	--	--	< 1.14
Toxaphene	05/21/2015	E608	< 0.222	< 0.202	--	< 0.235	< 0.208
Toxaphene	06/04/2015	E608	< 0.200	< 0.215	< 0.204	< 0.206	< 0.213
Toxaphene	06/16/2015	E608	--	--	< 0.206	--	--
Radium (pCi/L)							
Radium-226	01/20/2015	E903.1	--	--	--	--	< 0.901
Radium-226	03/31/2015	E903.1	**1.61**	**2.67**	--	--	--
Radium-226	04/15/2015	E903.1	**1.03**	**6.3**	< 0.253	--	--
Radium-226	05/21/2015	E903.1	**2.07**	**1.46**	--	**0.127**	**0.729**
Radium-226	06/04/2015	E903.1	--	--	**0.119**	**0.492**	**0.261**
Radium-226	06/16/2015	E903.1	--	--	**0.23**	--	--
Radium-228	01/20/2015	--	--	--	--	--	< 0.901
Radium-228	03/31/2015	SW9320	< 1.40	**2.88**	--	--	--
Radium-228	04/15/2015	SW9320	< 2.96	< 2.00	< 1.76	--	--
Radium-228	05/21/2015	E904.0	**1.47**	**1.32**	--	**0.475**	**0.283**
Radium-228	06/04/2015	E904.0	--	--	**-0.171**	**0.341**	**0.0745**
Radium-228	06/16/2015	E904.0	--	--	**0.371**	--	--
SVOCs (ug/L)							
1,2,4-Trichlorobenzene	01/20/2015	E625	--	--	--	--	< 10.9
1,2,4-Trichlorobenzene	05/21/2015	E625	< 2.02	< 2.04	--	< 2.04	< 2.13
1,2,4-Trichlorobenzene	06/04/2015	E625	< 2.17	< 2.06	< 2.08	< 2.02	< 10.6
1,2,4-Trichlorobenzene	06/16/2015	E625	--	--	< 2.06	--	--
1,2-Dichlorobenzene	01/20/2015	E625	--	--	--	--	< 10.9
1,2-Dichlorobenzene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
1,2-Dichlorobenzene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
1,2-Dichlorobenzene	06/16/2015	E625	--	--	< 1.03	--	--
1,2-Diphenylhydrazine	01/20/2015	E625	--	--	--	--	< 10.9
1,2-Diphenylhydrazine	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
1,2-Diphenylhydrazine	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
1,2-Diphenylhydrazine	06/16/2015	E625	--	--	< 10.3	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
1,3-Dichlorobenzene	01/20/2015	E625	--	--	--	--	< 10.9
1,3-Dichlorobenzene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
1,3-Dichlorobenzene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
1,3-Dichlorobenzene	06/16/2015	E625	--	--	< 1.03	--	--
1,4-Dichlorobenzene	01/20/2015	E625	--	--	--	--	< 10.9
1,4-Dichlorobenzene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
1,4-Dichlorobenzene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
1,4-Dichlorobenzene	06/16/2015	E625	--	--	< 1.03	--	--
2,4,6-Trichlorophenol	01/20/2015	E625	--	--	--	--	< 10.9
2,4,6-Trichlorophenol	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2,4,6-Trichlorophenol	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2,4,6-Trichlorophenol	06/16/2015	E625	--	--	< 1.03	--	--
2,4-Dichlorophenol	01/20/2015	E625	--	--	--	--	< 10.9
2,4-Dichlorophenol	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2,4-Dichlorophenol	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2,4-Dichlorophenol	06/16/2015	E625	--	--	< 1.03	--	--
2,4-Dimethylphenol	01/20/2015	E625	--	--	--	--	< 10.9
2,4-Dimethylphenol	05/21/2015	E625	< 0.51	< 0.51	--	< 0.51	< 0.53
2,4-Dimethylphenol	06/04/2015	E625	< 0.54	< 0.52	< 0.52	< 0.51	< 2.66
2,4-Dimethylphenol	06/16/2015	E625	--	--	< 0.52	--	--
2,4-Dinitrophenol	01/20/2015	E625	--	--	--	--	< 54.3
2,4-Dinitrophenol	05/21/2015	E625	< 0.51	< 0.51	--	< 0.51	< 0.53
2,4-Dinitrophenol	06/04/2015	E625	< 0.54	< 0.52	< 0.52	< 0.51	< 2.66
2,4-Dinitrophenol	06/16/2015	E625	--	--	< 0.52	--	--
2,4-Dinitrotoluene	01/20/2015	E625	--	--	--	--	< 10.9
2,4-Dinitrotoluene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2,4-Dinitrotoluene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2,4-Dinitrotoluene	06/16/2015	E625	--	--	< 1.03	--	--
2,6-Dinitrotoluene	01/20/2015	E625	--	--	--	--	< 10.9
2,6-Dinitrotoluene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2,6-Dinitrotoluene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2,6-Dinitrotoluene	06/16/2015	E625	--	--	< 1.03	--	--
2-Chloronaphthalene	01/20/2015	E625	--	--	--	--	< 10.9
2-Chloronaphthalene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2-Chloronaphthalene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2-Chloronaphthalene	06/16/2015	E625	--	--	< 1.03	--	--
2-Chlorophenol	01/20/2015	E625	--	--	--	--	< 10.9
2-Chlorophenol	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2-Chlorophenol	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2-Chlorophenol	06/16/2015	E625	--	--	< 1.03	--	--
2-Nitrophenol	01/20/2015	E625	--	--	--	--	< 10.9
2-Nitrophenol	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
2-Nitrophenol	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
2-Nitrophenol	06/16/2015	E625	--	--	< 1.03	--	--
3,3'-Dichlorobenzidine	01/20/2015	E625	--	--	--	--	< 10.9
3,3'-Dichlorobenzidine	05/21/2015	E625	< 4.04	< 4.08	--	< 4.08	< 4.26
3,3'-Dichlorobenzidine	06/04/2015	E625	< 4.35	< 4.12	< 4.17	< 4.04	< 21.3
3,3'-Dichlorobenzidine	06/16/2015	E625	--	--	< 4.12	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
4,6-Dinitro-2-methylphenol	01/20/2015	E625	--	--	--	--	< 54.3
4,6-Dinitro-2-methylphenol	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
4,6-Dinitro-2-methylphenol	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
4,6-Dinitro-2-methylphenol	06/16/2015	E625	--	--	< 1.03	--	--
4-Bromophenyl Phenyl Ether	01/20/2015	E625	--	--	--	--	< 10.9
4-Bromophenyl Phenyl Ether	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
4-Bromophenyl Phenyl Ether	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
4-Bromophenyl Phenyl Ether	06/16/2015	E625	--	--	< 1.03	--	--
4-Chlorophenyl-phenylether	01/20/2015	E625	--	--	--	--	< 10.9
4-Chlorophenyl-phenylether	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
4-Chlorophenyl-phenylether	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
4-Chlorophenyl-phenylether	06/16/2015	E625	--	--	< 1.03	--	--
4-Nitrophenol	01/20/2015	E625	--	--	--	--	< 54.3
4-Nitrophenol	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
4-Nitrophenol	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
4-Nitrophenol	06/16/2015	E625	--	--	< 1.03	--	--
Acenaphthene	01/20/2015	E625	--	--	--	--	< 10.9
Acenaphthene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Acenaphthene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Acenaphthene	06/16/2015	E625	--	--	< 1.03	--	--
Acenaphthylene	01/20/2015	E625	--	--	--	--	< 10.9
Acenaphthylene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Acenaphthylene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Acenaphthylene	06/16/2015	E625	--	--	< 1.03	--	--
Anthracene	01/20/2015	E625	--	--	--	--	< 10.9
Anthracene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Anthracene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Anthracene	06/16/2015	E625	--	--	< 1.03	--	--
Benzidine	01/20/2015	E625	--	--	--	--	< 54.3
Benzidine	05/21/2015	E625	< 50.5	< 51.0	--	< 51.0	< 53.2
Benzidine	06/04/2015	E625	< 54.3	< 51.5	< 52.1	< 50.5	< 266
Benzidine	06/16/2015	E625	--	--	< 51.5	--	--
Benzo[a]anthracene	01/20/2015	E625	--	--	--	--	< 10.9
Benzo[a]anthracene	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Benzo[a]anthracene	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Benzo[a]anthracene	06/16/2015	E625	--	--	< 10.3	--	--
Benzo[a]pyrene	01/20/2015	E625	--	--	--	--	< 10.9
Benzo[a]pyrene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Benzo[a]pyrene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Benzo[a]pyrene	06/16/2015	E625	--	--	< 1.03	--	--
Benzo[b]fluoranthene	01/20/2015	E625	--	--	--	--	< 10.9
Benzo[b]fluoranthene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Benzo[b]fluoranthene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Benzo[b]fluoranthene	06/16/2015	E625	--	--	< 1.03	--	--
Benzo[g,h,i]perylene	01/20/2015	E625	--	--	--	--	< 10.9
Benzo[g,h,i]perylene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Benzo[g,h,i]perylene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Benzo[g,h,i]perylene	06/16/2015	E625	--	--	< 1.03	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Benzo[k]fluoranthene	01/20/2015	E625	--	--	--	--	< 10.9
Benzo[k]fluoranthene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Benzo[k]fluoranthene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Benzo[k]fluoranthene	06/16/2015	E625	--	--	< 1.03	--	--
Bis(2-chloro-1-methylethyl) Ether	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Bis(2-chloro-1-methylethyl) Ether	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Bis(2-chloro-1-methylethyl) Ether	06/16/2015	E625	--	--	< 1.03	--	--
Bis(2-chloroethoxy)methane	01/20/2015	E625	--	--	--	--	< 10.9
Bis(2-chloroethoxy)methane	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Bis(2-chloroethoxy)methane	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Bis(2-chloroethoxy)methane	06/16/2015	E625	--	--	< 1.03	--	--
Bis(2-chloroethyl) Ether	01/20/2015	E625	--	--	--	--	< 10.9
Bis(2-chloroethyl) Ether	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Bis(2-chloroethyl) Ether	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Bis(2-chloroethyl) Ether	06/16/2015	E625	--	--	< 1.03	--	--
Bis(2-ethylhexyl) Phthalate	01/20/2015	E625	--	--	--	--	< 10.9
Bis(2-ethylhexyl) Phthalate	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Bis(2-ethylhexyl) Phthalate	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Bis(2-ethylhexyl) Phthalate	06/16/2015	E625	--	--	< 1.03	--	--
Butylbenzyl Phthalate	01/20/2015	E625	--	--	--	--	< 10.9
Butylbenzyl Phthalate	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Butylbenzyl Phthalate	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Butylbenzyl Phthalate	06/16/2015	E625	--	--	< 1.03	--	--
Chrysene	01/20/2015	E625	--	--	--	--	< 10.9
Chrysene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Chrysene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Chrysene	06/16/2015	E625	--	--	< 1.03	--	--
Dibenz[a,h]anthracene	01/20/2015	E625	--	--	--	--	< 10.9
Dibenz[a,h]anthracene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Dibenz[a,h]anthracene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Dibenz[a,h]anthracene	06/16/2015	E625	--	--	< 1.03	--	--
Diethyl Phthalate	01/20/2015	E625	--	--	--	--	< 10.9
Diethyl Phthalate	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Diethyl Phthalate	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Diethyl Phthalate	06/16/2015	E625	--	--	< 1.03	--	--
Dimethyl Phthalate	01/20/2015	E625	--	--	--	--	< 10.9
Dimethyl Phthalate	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Dimethyl Phthalate	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Dimethyl Phthalate	06/16/2015	E625	--	--	< 1.03	--	--
Di-n-Butyl Phthalate	01/20/2015	E625	--	--	--	--	< 10.9
Di-n-Butyl Phthalate	05/21/2015	E625	< 2.02	< 2.04	--	< 2.04	< 2.13
Di-n-Butyl Phthalate	06/04/2015	E625	< 2.17	< 2.06	< 2.08	< 2.02	< 10.6
Di-n-Butyl Phthalate	06/16/2015	E625	--	--	< 2.06	--	--
Di-n-octyl Phthalate	01/20/2015	E625	--	--	--	--	< 10.9
Di-n-octyl Phthalate	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Di-n-octyl Phthalate	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Di-n-octyl Phthalate	06/16/2015	E625	--	--	< 1.03	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Fluoranthene	01/20/2015	E625	--	--	--	--	< 10.9
Fluoranthene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Fluoranthene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Fluoranthene	06/16/2015	E625	--	--	< 1.03	--	--
Fluorene	01/20/2015	E625	--	--	--	--	< 10.9
Fluorene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Fluorene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Fluorene	06/16/2015	E625	--	--	< 1.03	--	--
Hexachlorobenzene	01/20/2015	E625	--	--	--	--	< 2.72
Hexachlorobenzene	05/21/2015	E625	< 2.53	< 2.55	--	< 2.55	< 2.66
Hexachlorobenzene	06/04/2015	E625	< 2.72	< 2.58	< 2.60	< 2.53	< 13.3
Hexachlorobenzene	06/16/2015	E625	--	--	< 2.58	--	--
Hexachlorobutadiene	01/20/2015	E625	--	--	--	--	< 10.9
Hexachlorobutadiene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Hexachlorobutadiene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Hexachlorobutadiene	06/16/2015	E625	--	--	< 1.03	--	--
Hexachlorocyclopentadiene	01/20/2015	E625	--	--	--	--	< 10.9
Hexachlorocyclopentadiene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Hexachlorocyclopentadiene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Hexachlorocyclopentadiene	06/16/2015	E625	--	--	< 1.03	--	--
Hexachloroethane	01/20/2015	E625	--	--	--	--	< 10.9
Hexachloroethane	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Hexachloroethane	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Hexachloroethane	06/16/2015	E625	--	--	< 1.03	--	--
Indeno[1,2,3-cd]pyrene	01/20/2015	E625	--	--	--	--	< 10.9
Indeno[1,2,3-cd]pyrene	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Indeno[1,2,3-cd]pyrene	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Indeno[1,2,3-cd]pyrene	06/16/2015	E625	--	--	< 1.03	--	--
Isophorone	01/20/2015	E625	--	--	--	--	< 10.9
Isophorone	05/21/2015	E625	< 1.01	< 1.02	--	< 1.02	< 1.06
Isophorone	06/04/2015	E625	< 1.09	< 1.03	< 1.04	< 1.01	< 5.32
Isophorone	06/16/2015	E625	--	--	< 1.03	--	--
Kepone	01/20/2015	SW8270D	--	--	--	--	< 10.9
Kepone	05/21/2015	SW8270D	< 2.02	< 2.04	--	< 2.04	< 2.13
Kepone	06/04/2015	SW8270D	< 2.17	< 2.06	< 2.08	< 2.02	< 10.6
Kepone	06/16/2015	SW8270D	--	--	< 2.06	--	--
Naphthalene	01/20/2015	E625	--	--	--	--	< 10.9
Naphthalene	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Naphthalene	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Naphthalene	06/16/2015	E625	--	--	< 10.3	--	--
Nitrobenzene	01/20/2015	E625	--	--	--	--	< 10.9
Nitrobenzene	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Nitrobenzene	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Nitrobenzene	06/16/2015	E625	--	--	< 10.3	--	--
N-Nitrosodimethylamine	01/20/2015	E625	--	--	--	--	< 10.9
N-Nitrosodimethylamine	05/21/2015	E625	< 2.02	< 2.04	--	< 2.04	< 2.13
N-Nitrosodimethylamine	06/04/2015	E625	< 2.17	< 2.06	< 2.08	< 2.02	< 10.6

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
N-Nitrosodimethylamine	06/16/2015	E625	--	--	< 2.06	--	--
N-Nitroso-di-n-propylamine	01/20/2015	E625	--	--	--	--	< 10.9
N-Nitroso-di-n-propylamine	05/21/2015	E625	< 2.02	< 2.04	--	< 2.04	< 2.13
N-Nitroso-di-n-propylamine	06/04/2015	E625	< 2.17	< 2.06	< 2.08	< 2.02	< 10.6
N-Nitroso-di-n-propylamine	06/16/2015	E625	--	--	< 2.06	--	--
N-Nitrosodiphenylamine	01/20/2015	E625	--	--	--	--	< 10.9
N-Nitrosodiphenylamine	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
N-Nitrosodiphenylamine	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
N-Nitrosodiphenylamine	06/16/2015	E625	--	--	< 10.3	--	--
Nonylphenol	01/20/2015	D7065	--	--	--	--	< 5
Nonylphenol	05/21/2015	D7065	< 0.8182	< 0.8182	--	< 0.8182	< 0.8182
Nonylphenol	06/04/2015	D7065	< 0.8182	< 0.8182	< 0.8182	< 0.8182	< 0.8182
Nonylphenol	06/16/2015	D7065	--	--	< 0.8182	--	--
p-Chloro-m-cresol	01/20/2015	E625	--	--	--	--	< 10.9
p-Chloro-m-cresol	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
p-Chloro-m-cresol	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
p-Chloro-m-cresol	06/16/2015	E625	--	--	< 10.3	--	--
Pentachlorophenol	01/20/2015	E625	--	--	--	--	< 21.7
Pentachlorophenol	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Pentachlorophenol	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Pentachlorophenol	06/16/2015	E625	--	--	< 10.3	--	--
Phenanthrene	01/20/2015	E625	--	--	--	--	< 10.9
Phenanthrene	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Phenanthrene	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Phenanthrene	06/16/2015	E625	--	--	< 10.3	--	--
Phenol	01/20/2015	E420.4	--	--	--	--	< 10.9
Phenol	01/20/2015	E625	--	--	--	--	< 10.9
Phenol	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Phenol	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Phenol	06/16/2015	E625	--	--	< 10.3	--	--
Pyrene	01/20/2015	E625	--	--	--	--	< 10.9
Pyrene	05/21/2015	E625	< 10.1	< 10.2	--	< 10.2	< 10.6
Pyrene	06/04/2015	E625	< 10.9	< 10.3	< 10.4	< 10.1	< 53.2
Pyrene	06/16/2015	E625	--	--	< 10.3	--	--
Total Metals (ug/L)							
Aluminum	01/20/2015	SM3111D	--	--	--	--	< 130
Aluminum	03/31/2015	SW6010C	**22200**	**249000**	--	--	--
Aluminum	04/15/2015	SW6010C	**9220**	**65100**	**244**	--	--
Aluminum	05/21/2015	E200.7	**76300**	**120000**	--	**76.1**	**181**
Aluminum	06/04/2015	E200.7	**24700**	**123000**	< 20.0	**334**	**261**
Aluminum	06/16/2015	E200.7	--	--	< 20.0	--	--
Antimony	01/20/2015	SM3113B	--	--	--	--	< 1
Antimony	03/31/2015	SW6020A	**11.7**	**13.4**	--	--	--
Antimony	04/15/2015	SW6020A	**13.5**	**8.79**	**0.715**	**0.355**	**0.909**
Antimony	05/21/2015	E200.8	**4.77**	**9.50**	--	**0.157**	**0.559**
Antimony	06/04/2015	E200.8	**4.73**	**7.97**	< 0.110	**0.247**	**0.213**
Antimony	06/16/2015	E200.8	--	--	< 0.110	--	--
Arsenic	01/20/2015	SM3113B	--	--	--	--	< 2

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Arsenic	03/31/2015	SW6010C	173	813	--	--	--
Arsenic	04/15/2015	SW6010C	265	425	< 6.80	--	--
Arsenic	05/21/2015	E200.8	1020	838	--	3.59	7.43
Arsenic	05/21/2015	E200.9	--	544	--	--	--
Arsenic	06/04/2015	E200.8	485	1460	< 0.610	8.57	3.89
Arsenic	06/04/2015	E200.9	--	511	--	--	--
Arsenic	06/16/2015	E200.8	--	--	< 0.610	--	--
Barium	01/20/2015	SM3113B	--	--	--	--	43
Barium	03/31/2015	SW6010C	758	9370	--	--	--
Barium	04/15/2015	SW6010C	844	2620	114	--	--
Barium	05/21/2015	E200.7	2510	3680	--	58.9	125
Barium	06/04/2015	E200.7	1260	3540	14.5	59.9	108
Barium	06/16/2015	E200.7	--	--	13.4	--	--
Beryllium	01/20/2015	SM3113B	--	--	--	--	< 0.2
Beryllium	03/31/2015	SW6010C	5.54	87.7	--	--	--
Beryllium	04/15/2015	SW6010C	3.14	31.9	< 0.100	--	--
Beryllium	05/21/2015	E200.7	22.6	57.0	--	< 2.0	< 2.0
Beryllium	06/04/2015	E200.7	6.8	64.9	< 2.0	< 2.0	< 2.0
Beryllium	06/16/2015	E200.7	--	--	< 2.0	--	--
Boron	03/31/2015	SW6010C	1320	2190	--	--	--
Boron	04/15/2015	SW6010C	2790	2190	396	230	413
Boron	05/21/2015	E200.7	1630	1750	--	217	410
Boron	06/04/2015	E200.7	1740	1890	774	238	245
Boron	06/16/2015	E200.7	--	--	777	--	--
Cadmium	01/20/2015	SM3113B	--	--	--	--	< 0.3
Cadmium	03/31/2015	SW6010C	< 0.360	1.36	--	--	--
Cadmium	04/15/2015	SW6010C	< 0.360	1.33	< 0.360	< 0.360	< 0.360
Cadmium	05/21/2015	E200.8	2.26	9.41	--	< 0.110	< 0.110
Cadmium	06/04/2015	E200.8	0.636	11.5	< 0.110	< 0.110	< 0.110
Cadmium	06/16/2015	E200.8	--	--	< 0.110	--	--
Calcium	03/31/2015	SW6010C	53700	174000	--	--	--
Calcium	04/15/2015	SW6010C	129000	179000	32000	125000	35700
Calcium	05/21/2015	E200.7	137000	189000	--	119000	33400
Calcium	06/04/2015	E200.7	128000	228000	20900	124000	28800
Calcium	06/16/2015	E200.7	--	--	20400	--	--
Chromium	01/20/2015	SM3113B	--	--	--	--	< 1
Chromium	03/31/2015	SW6010C	32.3	366	--	--	--
Chromium	04/15/2015	SW6010C	20.5	150	< 1.40	< 1.40	< 1.40
Chromium	05/21/2015	E200.8	112	342	--	0.498	< 0.450
Chromium	06/04/2015	E200.8	23.6	557	< 0.450	3.08	< 0.450
Chromium	06/16/2015	E200.8	--	--	< 0.450	--	--
Chromium (III)	05/21/2015	CALC	112	342	--	< 5	< 5
Chromium (III)	06/04/2015	CALC	24	557	< 5	< 5	< 5
Chromium (III)	06/16/2015	CALC	--	--	< 5	--	--
Cobalt	01/20/2015	SM3113B	--	--	--	--	< 0.6
Cobalt	03/31/2015	SW6010C	25.5	265	--	--	--
Cobalt	04/15/2015	SW6010C	13.6	79.7	< 1.10	--	--
Cobalt	05/21/2015	E200.7	77.6	167	--	< 2.0	< 2.0
Cobalt	06/04/2015	E200.7	29.4	174	< 2.0	5.5	< 2.0
Cobalt	06/16/2015	E200.7	--	--	< 2.0	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Copper	01/20/2015	SM3113B	--	--	--	--	11
Copper	03/31/2015	SW6010C	86.6	1050	--	--	--
Copper	04/15/2015	SW6010C	57.7	404	2.81	4.04	4.26
Copper	05/21/2015	E200.8	363	1110	--	1.63	2.32
Copper	05/21/2015	E200.9	--	806	--	--	--
Copper	06/04/2015	E200.8	70.3	1780	< 0.220	6.05	2.87
Copper	06/04/2015	E200.9	--	853	--	--	--
Copper	06/16/2015	E200.8	--	--	0.681	--	--
Hexavalent Chromium	04/15/2015	SM3500-CR-B	< 8.8	16	17	< 8.8	12
Hexavalent Chromium	05/21/2015	SM3500-CR-B	< 50	< 25	--	< 5	< 5
Hexavalent Chromium	06/04/2015	SM3500-CR-B	< 25	< 100	< 5	< 5	< 5
Hexavalent Chromium	06/16/2015	SM3500-CR-B	--	--	< 5	--	--
Iron	01/20/2015	SM3111B	--	--	--	--	240
Iron	03/31/2015	SW6010C	10700	103000	--	--	--
Iron	04/15/2015	SW6010C	4070	22600	1030	142	379
Iron	05/21/2015	E200.7	27800	29800	--	548	244
Iron	06/04/2015	E200.7	8930	30600	12.7	1410	481
Iron	06/16/2015	E200.7	--	--	3.6	--	--
Lead	01/20/2015	SM3113B	--	--	--	--	< 1
Lead	03/31/2015	SW6010C	28.8	336	--	--	--
Lead	04/15/2015	SW6010C	15.9	77.2	< 3.10	< 3.10	< 3.10
Lead	05/21/2015	E200.8	152	244	--	< 0.160	< 0.160
Lead	06/04/2015	E200.8	35.6	579	< 0.160	1.47	0.254
Lead	06/16/2015	E200.8	--	--	< 0.160	--	--
Lithium	03/31/2015	SW6010C	259	579	--	--	--
Lithium	04/15/2015	SW6010C	507	372	5.39	--	--
Lithium	05/21/2015	SW6010C	--	--	--	320	320
Lithium	06/04/2015	SW6010C	44	320	< 1.2	330	< 1.2
Lithium	06/16/2015	SW6010C	--	--	< 1.2	--	--
Magnesium	01/20/2015	SM3111B	--	--	--	--	4570
Magnesium	03/31/2015	SW6010C	15200	41200	--	--	--
Magnesium	04/15/2015	SW6010C	31400	30300	13300	4380	11200
Magnesium	05/21/2015	E200.7	32500	38200	--	4140	10700
Magnesium	06/04/2015	E200.7	28600	47000	6770	4880	8340
Magnesium	06/16/2015	E200.7	--	--	6650	--	--
Manganese	01/20/2015	SM3111B	--	--	--	--	30
Manganese	03/31/2015	SW6010C	463	1170	--	--	--
Manganese	04/15/2015	SW6010C	858	994	241	27.8	100
Manganese	05/21/2015	E200.7	1280	1850	--	79.2	103
Manganese	06/04/2015	E200.7	1110	1850	< 2.0	542	175
Manganese	06/16/2015	E200.7	--	--	< 2.0	--	--
Mercury	01/20/2015	SM3112B	--	--	--	--	< 0.02
Mercury	03/31/2015	SW7470A	< 0.170	0.862	--	--	--
Mercury	04/15/2015	SW7470A	< 0.170	0.361	< 0.170	< 0.170	< 0.170
Mercury	05/21/2015	E245.1	0.189	1.86	--	< 0.023	< 0.023
Mercury	06/04/2015	E245.1	< 0.023	5.39	0.147	< 0.023	< 0.023
Mercury	06/16/2015	E245.1	--	--	< 0.023	--	--
Molybdenum	01/20/2015	SM3113B	--	--	--	--	7
Molybdenum	03/31/2015	SW6010C	226	64.9	--	--	--
Molybdenum	04/15/2015	SW6010C	305	32.6	< 2.50	--	--
Molybdenum	05/21/2015	E200.7	52.6	< 50.0	--	< 50.0	< 50.0

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Molybdenum	06/04/2015	E200.7	**92.5**	< 50.0	< 50.0	< 50.0	< 50.0
Molybdenum	06/16/2015	E200.7	--	--	< 50.0	--	--
Nickel	01/20/2015	SM3113B	--	--	--	--	< 5
Nickel	03/31/2015	SW6010C	**40.5**	**430**	--	--	--
Nickel	04/15/2015	SW6010C	**30.3**	**135**	**7.55**	**15.1**	**8.40**
Nickel	05/21/2015	E200.8	**126**	**332**	--	**11.4**	**1.81**
Nickel	06/04/2015	E200.8	**31.0**	**625**	**0.403**	**20.3**	**1.72**
Nickel	06/16/2015	E200.8	--	--	**0.527**	--	--
Potassium	03/31/2015	SW6010C	**12600**	**44500**	--	--	--
Potassium	04/15/2015	SW6010C	**13900**	**20600**	**1860**	--	--
Potassium	05/21/2015	E200.7	**23400**	**27700**	--	**30200**	**3470**
Potassium	06/04/2015	E200.7	**14800**	**25400**	**1070**	**28300**	**3340**
Potassium	06/16/2015	E200.7	--	--	**990**	--	--
Selenium	01/20/2015	SM3113B	--	--	--	--	< 2
Selenium	03/31/2015	SW6010C	< 5.00	**90.0**	--	--	--
Selenium	04/15/2015	SW6010C	< 5.00	**15.1**	< 5.00	< 5.00	< 5.00
Selenium	05/21/2015	E200.8	< 13.0	**35.3**	--	**5.48**	< 0.650
Selenium	06/04/2015	E200.8	< 3.25	**144**	< 0.650	**10.6**	< 0.650
Selenium	06/16/2015	E200.8	--	--	< 0.650	--	--
Silver	01/20/2015	SM3113B	--	--	--	--	< 0.1
Silver	03/31/2015	SW6020A	< 0.500	< 1.00	--	--	--
Silver	04/15/2015	SW6010C	< 1.90	< 1.90	< 1.90	< 1.90	< 1.90
Silver	05/21/2015	E200.8	< 0.580	< 0.870	--	< 0.029	< 0.029
Silver	06/04/2015	E200.8	< 0.145	< 0.870	< 0.029	< 0.029	< 0.029
Silver	06/16/2015	E200.8	--	--	< 0.029	--	--
Sodium	03/31/2015	SW6010C	**76000**	**16200**	--	--	--
Sodium	04/15/2015	SW6010C	**36900**	**10500**	**20000**	--	--
Sodium	05/21/2015	E200.7	**17700**	**11800**	--	**9810**	**19600**
Sodium	06/04/2015	E200.7	**15400**	**11500**	**22000**	**9890**	**14800**
Sodium	06/16/2015	E200.7	--	--	**21300**	--	--
Thallium	01/20/2015	E279.2	--	--	--	--	< 0.3
Thallium	03/31/2015	SW6020A	**1.91**	**11.4**	--	--	--
Thallium	04/15/2015	SW6020A	**0.818**	**9.12**	< 0.110	**0.141**	**0.134**
Thallium	05/21/2015	E200.8	**7.96**	**26.4**	--	< 0.058	< 0.058
Thallium	06/04/2015	E200.8	**1.78**	**46.4**	< 0.058	**0.096**	< 0.058
Thallium	06/16/2015	E200.8	--	--	< 0.058	--	--
Vanadium	03/31/2015	SW6010C	**176**	**1420**	--	--	--
Vanadium	04/15/2015	SW6010C	**159**	**796**	< 1.40	--	--
Vanadium	05/21/2015	E200.7	**407**	**718**	--	< 2.0	**2.8**
Vanadium	06/04/2015	E200.7	**131**	**1080**	< 2.0	< 2.0	< 2.0
Vanadium	06/16/2015	E200.7	--	--	< 2.0	--	--
Zinc	01/20/2015	SM3111B	--	--	--	--	**13**
Zinc	03/31/2015	SW6010C	**58.1**	**447**	--	--	--
Zinc	04/15/2015	SW6010C	**35.5**	**167**	< 3.80	< 3.80	**4.31**
Zinc	05/21/2015	E200.8	**228**	**491**	--	**16.9**	**14.0**
Zinc	06/04/2015	E200.8	**47.2**	**943**	< 1.60	**9.35**	**6.28**
Zinc	06/16/2015	E200.8	--	--	**5.50**	--	--
VOCs (ug/L)							
1,1,1-Trichloroethane	01/20/2015	E624	--	--	--	--	< 1
1,1,1-Trichloroethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
1,1,1-Trichloroethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,1-Trichloroethane	06/16/2015	E624	--	--	< 1.00	--	--
1,1,2,2-Tetrachloroethane	01/20/2015	E624	--	--	--	--	< 1
1,1,2,2-Tetrachloroethane	05/21/2015	E624	< 1.50	< 1.50	--	< 1.50	< 1.50
1,1,2,2-Tetrachloroethane	06/04/2015	E624	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
1,1,2,2-Tetrachloroethane	06/16/2015	E624	--	--	< 1.50	--	--
1,1,2-Trichloroethane	01/20/2015	E624	--	--	--	--	< 1
1,1,2-Trichloroethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,1,2-Trichloroethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1,2-Trichloroethane	06/16/2015	E624	--	--	< 1.00	--	--
1,1-Dichloroethane	01/20/2015	E624	--	--	--	--	< 1
1,1-Dichloroethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,1-Dichloroethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethane	06/16/2015	E624	--	--	< 1.00	--	--
1,1-Dichloroethene	01/20/2015	E624	--	--	--	--	< 1
1,1-Dichloroethene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,1-Dichloroethene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,1-Dichloroethene	06/16/2015	E624	--	--	< 1.00	--	--
1,2-Dichlorobenzene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,2-Dichlorobenzene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,2-Dichlorobenzene	06/16/2015	E624	--	--	< 1.00	--	--
1,2-Dichloroethane	01/20/2015	E624	--	--	--	--	< 1
1,2-Dichloroethane	05/21/2015	E624	< 1.50	< 1.50	--	< 1.50	< 1.50
1,2-Dichloroethane	06/04/2015	E624	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
1,2-Dichloroethane	06/16/2015	E624	--	--	< 1.50	--	--
1,2-Dichloropropane	01/20/2015	E624	--	--	--	--	< 1
1,2-Dichloropropane	05/21/2015	E624	< 1.50	< 1.50	--	< 1.50	< 1.50
1,2-Dichloropropane	06/04/2015	E624	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
1,2-Dichloropropane	06/16/2015	E624	--	--	< 1.50	--	--
1,3-Dichlorobenzene	01/20/2015	E624	--	--	--	--	< 10
1,3-Dichlorobenzene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,3-Dichlorobenzene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,3-Dichlorobenzene	06/16/2015	E624	--	--	< 1.00	--	--
1,3-Dichloropropene, Total	01/20/2015	E624	--	--	--	--	< 10
1,3-Dichloropropene, Total	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,3-Dichloropropene, Total	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,3-Dichloropropene, Total	06/16/2015	E624	--	--	< 1.00	--	--
1,4-Dichlorobenzene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
1,4-Dichlorobenzene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
1,4-Dichlorobenzene	06/16/2015	E624	--	--	< 1.00	--	--
2-Chloroethyl Vinyl Ether	01/20/2015	E624	--	--	--	--	< 10
2-Chloroethyl Vinyl Ether	05/21/2015	E624	< 5.00	< 5.00	--	< 5.00	< 5.00
2-Chloroethyl Vinyl Ether	06/04/2015	E624	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
2-Chloroethyl Vinyl Ether	06/16/2015	E624	--	--	< 5.00	--	--
Acrolein	01/20/2015	E624	--	--	--	--	< 10
Acrolein	05/21/2015	E624	< 25.5	< 25.5	--	< 25.5	< 25.5
Acrolein	06/04/2015	E624	< 25.5	< 25.5	< 25.5	< 25.5	< 25.5

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Acrolein	06/16/2015	E624	--	--	< 25.5	--	--
Acrylonitrile	01/20/2015	E624	--	--	--	--	8.95
Acrylonitrile	05/21/2015	E624	< 8.50	< 8.50	--	< 8.50	< 8.50
Acrylonitrile	06/04/2015	E624	< 8.50	< 8.50	< 8.50	< 8.50	< 8.50
Acrylonitrile	06/16/2015	E624	--	--	< 8.50	--	--
Benzene	01/20/2015	E624	--	--	--	--	< 1
Benzene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Benzene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Benzene	06/16/2015	E624	--	--	< 1.00	--	--
Bromodichloromethane	01/20/2015	E624	--	--	--	--	< 1
Bromodichloromethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Bromodichloromethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromodichloromethane	06/16/2015	E624	--	--	< 1.00	--	--
Bromoform	01/20/2015	E624	--	--	--	--	< 1
Bromoform	05/21/2015	E624	< 1.50	< 1.50	--	< 1.50	< 1.50
Bromoform	06/04/2015	E624	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Bromoform	06/16/2015	E624	--	--	< 1.50	--	--
Bromomethane	01/20/2015	E624	--	--	--	--	< 1
Bromomethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Bromomethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Bromomethane	06/16/2015	E624	--	--	< 1.00	--	--
Carbon Tetrachloride	01/20/2015	E624	--	--	--	--	< 1000
Carbon Tetrachloride	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Carbon Tetrachloride	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Carbon Tetrachloride	06/16/2015	E624	--	--	< 1.00	--	--
Chlorobenzene	01/20/2015	E624	--	--	--	--	< 1
Chlorobenzene	05/21/2015	E624	< 0.50	< 0.50	--	< 0.50	< 0.50
Chlorobenzene	06/04/2015	E624	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chlorobenzene	06/16/2015	E624	--	--	< 0.50	--	--
Chloroethane	01/20/2015	E624	--	--	--	--	< 1
Chloroethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Chloroethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroethane	06/16/2015	E624	--	--	< 1.00	--	--
Chloroform	01/20/2015	E624	--	--	--	--	< 1
Chloroform	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Chloroform	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Chloroform	06/16/2015	E624	--	--	< 1.00	--	--
Chloromethane	01/20/2015	E624	--	--	--	--	< 1
Chloromethane	05/21/2015	E624	< 1.50	< 1.50	--	< 1.50	< 1.50
Chloromethane	06/04/2015	E624	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Chloromethane	06/16/2015	E624	--	--	< 1.50	--	--
cis-1,3-Dichloropropene	01/20/2015	E624	--	--	--	--	< 1
cis-1,3-Dichloropropene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
cis-1,3-Dichloropropene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
cis-1,3-Dichloropropene	06/16/2015	E624	--	--	< 1.00	--	--
Dibromochloromethane	01/20/2015	E624	--	--	--	--	< 1
Dibromochloromethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Dibromochloromethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Dibromochloromethane	06/16/2015	E624	--	--	< 1.00	--	--
Ethylbenzene	01/20/2015	E624	--	--	--	--	< 1
Ethylbenzene	05/21/2015	E624	< 0.50	< 0.50	--	< 0.50	< 0.50
Ethylbenzene	06/04/2015	E624	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Ethylbenzene	06/16/2015	E624	--	--	< 0.50	--	--
m,p-Xylenes	01/20/2015	E624	--	--	--	--	< 2
m,p-Xylenes	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
m,p-Xylenes	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
m,p-Xylenes	06/16/2015	E624	--	--	< 1.00	--	--
Methylene Chloride	01/20/2015	E624	--	--	--	--	< 4
Methylene Chloride	05/21/2015	E624	< 5.00	< 5.00	--	< 5.00	< 5.00
Methylene Chloride	06/04/2015	E624	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00
Methylene Chloride	06/16/2015	E624	--	--	< 5.00	--	--
o-Xylene	01/20/2015	E624	--	--	--	--	< 1
o-Xylene	05/21/2015	E624	< 0.50	< 0.50	--	< 0.50	< 0.50
o-Xylene	06/04/2015	E624	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
o-Xylene	06/16/2015	E624	--	--	< 0.50	--	--
Tetrachloroethene	01/20/2015	E624	--	--	--	--	< 1
Tetrachloroethene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Tetrachloroethene	06/04/2015	E624	**1.56**	**1.68**	< 1.00	**1.16**	< 1.00
Tetrachloroethene	06/16/2015	E624	--	--	< 1.00	--	--
Toluene	01/20/2015	E624	--	--	--	--	< 1
Toluene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Toluene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Toluene	06/16/2015	E624	--	--	< 1.00	--	--
trans-1,2-Dichloroethene	01/20/2015	E624	--	--	--	--	< 1
trans-1,2-Dichloroethene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
trans-1,2-Dichloroethene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,2-Dichloroethene	06/16/2015	E624	--	--	< 1.00	--	--
trans-1,3-Dichloropropene	01/20/2015	E624	--	--	--	--	< 1
trans-1,3-Dichloropropene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
trans-1,3-Dichloropropene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
trans-1,3-Dichloropropene	06/16/2015	E624	--	--	< 1.00	--	--
Trichloroethene	01/20/2015	E624	--	--	--	--	< 1
Trichloroethene	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Trichloroethene	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichloroethene	06/16/2015	E624	--	--	< 1.00	--	--
Trichlorofluoromethane	01/20/2015	E624	--	--	--	--	< 1
Trichlorofluoromethane	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Trichlorofluoromethane	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Trichlorofluoromethane	06/16/2015	E624	--	--	< 1.00	--	--
Vinyl Chloride	01/20/2015	E624	--	--	--	--	< 1
Vinyl Chloride	05/21/2015	E624	< 1.00	< 1.00	--	< 1.00	< 1.00
Vinyl Chloride	06/04/2015	E624	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Vinyl Chloride	06/16/2015	E624	--	--	< 1.00	--	--
Xylenes, Total	01/20/2015	E624	--	--	--	--	< 3

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Xylenes, Total	05/21/2015	E624	< 1.50	< 1.50	--	< 1.50	< 1.50
Xylenes, Total	06/04/2015	E624	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Xylenes, Total	06/16/2015	E624	--	--	< 1.50	--	--
WQ/Other (ug/L)							
Alkalinity, Total	03/31/2015	E310.2	**280000**	**380000**	--	--	--
Alkalinity, Total	04/15/2015	E310.2	**430000**	**420000**	**110000**	--	--
Alkalinity, Total	05/21/2015	SM2320B	**421000**	**397000**	--	**136000**	**113000**
Alkalinity, Total	06/04/2015	SM2320B	--	--	**72000**	**136000**	**92000**
Alkalinity, Total	06/16/2015	SM2320B	--	--	**74000**	--	--
Ammonia	03/31/2015	E350.1	**220**	**280**	--	--	--
Ammonia	04/15/2015	E350.1	**330**	**310**	< 45	< 45	< 45
Ammonia Nitrogen	01/20/2015	SM4500-NH3-D	--	--	--	--	**60**
Ammonia Nitrogen	05/21/2015	E350.1	**460**	**210**	--	**90**	**80**
Ammonia Nitrogen	06/04/2015	E350.1	--	--	< 50	--	--
Ammonia Nitrogen	06/16/2015	E350.1	--	--	< 50	--	--
Biochemical Oxygen Demand	01/20/2015	SM5210B	--	--	--	--	< 2000
Biochemical Oxygen Demand	03/31/2015	SM5210B	< 2000	**2000**	--	--	--
Biochemical Oxygen Demand	04/15/2015	SM5210B	< 2000	< 2000	< 2000	--	--
Biochemical Oxygen Demand	05/21/2015	SM5210B	< 200	< 200	--	< 200	< 200
Biochemical Oxygen Demand	06/04/2015	SM5210B	--	--	< 200	< 200	< 200
Biochemical Oxygen Demand	06/16/2015	SM5210B	--	--	**700**	--	--
Bromide	01/20/2015	E300	--	--	--	--	< 1000
Bromide	04/15/2015	E300	**790**	**110**	**230**	**71**	**180**
Bromide	05/21/2015	E300.0A	< 1000	< 1000	--	**3050**	< 1000
Bromide	06/16/2015	E300.0A	--	--	< 5000	--	--
Chemical Oxygen Demand	01/20/2015	H8000	--	--	--	--	< 5000
Chemical Oxygen Demand	05/21/2015	SM5220D	**1170000**	**3920000**	--	**14600**	< 10000
Chemical Oxygen Demand	06/04/2015	SM5220D	**115000**	**1090000**	< 10000	**22100**	**16300**
Chemical Oxygen Demand	06/16/2015	SM5220D	--	--	< 10000	--	--
Chloride	01/20/2015	E300	--	--	--	--	**14700**
Chloride	03/31/2015	E300	**15000**	**5500**	--	--	--
Chloride	04/15/2015	E300	**17000**	**4100**	**9700**	**3800**	**15000**
Chloride	05/21/2015	E300.0A	**12300**	**2900**	--	< 1000	**14000**
Chloride	06/04/2015	E300.0A	--	--	**11800**	--	--
Chloride	06/16/2015	E300.0A	--	--	**11600**	--	--
Cyanide	01/20/2015	SM4500-CN-E	--	--	--	--	< 10
Cyanide	05/21/2015	SM4500-CN-E	< 10	< 10	--	**12**	< 10
Cyanide	06/04/2015	SM4500-CN-E	< 10	< 10	< 10	< 10	< 10
Cyanide	06/16/2015	SM4500-CN-E	--	--	< 10	--	--
Fluoride	01/20/2015	E300	--	--	--	--	**44**
Fluoride	03/31/2015	E300	**420**	**130**	--	--	--
Fluoride	04/15/2015	E300	**410**	**120**	**100**	--	--
Fluoride	05/21/2015	E300.0A	**600**	< 100	--	**500**	< 100
Fluoride	06/04/2015	E300.0A	--	--	< 100	**500**	< 100
Fluoride	06/16/2015	E300.0A	--	--	< 500	--	--
Hardness	04/15/2015	SM2340B	**450000**	**570000**	**130000**	--	--
Hardness	05/21/2015	SM2340B	**476000**	**628000**	--	**313000**	**128000**
Hardness	06/04/2015	SM2340B	**438000**	**764000**	**80000**	**330000**	**106000**
Hardness	06/16/2015	SM2340B	--	--	**78300**	--	--

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			Ash Dewatering Water		Toe Drain	Commingled Process and Stormwater	
Nitrate	05/21/2015	CALC	< 150	< 150	--	< 150	< 150
Nitrate	06/04/2015	CALC	--	--	< 150	--	--
Nitrate	06/16/2015	CALC	--	--	< 150	--	--
Nitrite	05/21/2015	SM4500-NO2	< 50	< 50	--	< 50	< 50
Nitrite	06/04/2015	SM4500-NO2	--	--	< 50	--	--
Nitrite	06/16/2015	SM4500-NO2	--	--	< 50	--	--
Nitrogen, Nitrate-Nitrite	01/20/2015	E353.2	--	--	--	--	**170**
Nitrogen, Nitrate-Nitrite	03/31/2015	E353.2	< 41	< 41	--	--	--
Nitrogen, Nitrate-Nitrite	04/15/2015	E353.2	< 41	**83**	< 41	< 41	< 41
Nitrogen, Nitrate-Nitrite	05/21/2015	SM4500-NO3-F	**40**	**40**	--	**40**	**40**
Nitrogen, Nitrate-Nitrite	06/04/2015	SM4500-NO3-F	--	--	**120**	--	--
Nitrogen, Nitrate-Nitrite	06/16/2015	SM4500-NO3-F	--	--	**40**	--	--
Nitrogen, Total Kjeldahl	01/20/2015	E351.2	--	--	--	--	< 300
Nitrogen, Total Kjeldahl	04/15/2015	E351.2	**770**	**11000**	**320**	**400**	**340**
Nitrogen, Total Kjeldahl	05/21/2015	E351.2	**1480**	**1630**	--	**560**	< 200
Nitrogen, Total Kjeldahl	06/04/2015	E351.2	--	--	< 200	--	--
Nitrogen, Total Kjeldahl	06/16/2015	E351.2	--	--	< 200	--	--
Oil & Grease, Total Rec	01/20/2015	E1664B	--	--	--	--	< 5000
Oil & Grease, Total Rec	03/31/2015	E1664B	< 2400	< 2400	--	--	--
Oil & Grease, Total Rec	04/15/2015	E1664B	< 2400	< 2400	< 2400	< 2400	< 2400
Oil & Grease, Total Rec	05/21/2015	E1664A	< 5000	< 5000	--	< 5000	< 5000
Oil & Grease, Total Rec	06/04/2015	E1664A	--	--	< 5200	--	--
Oil & Grease, Total Rec	06/16/2015	E1664A	--	--	< 5000	--	--
Phosphorus	01/20/2015	SM4500-P-E	--	--	--	--	**60**
Phosphorus	04/15/2015	E365.4	**510**	**4400**	< 25	< 25	**30**
Phosphorus	05/21/2015	SM4500-P-E	**2930**	**12900**	--	**20**	**10**
Phosphorus	06/04/2015	SM4500-P-E	--	--	≤ 10	--	--
Phosphorus	06/16/2015	SM4500-P-E	--	--	**20**	--	--
Sulfate	01/20/2015	E300	--	--	--	--	**23210**
Sulfate	03/31/2015	E300	**74000**	**53000**	--	--	--
Sulfate	04/15/2015	E300	**40000**	**43000**	**39000**	**220000**	**42000**
Sulfate	05/21/2015	E300.0A	**7100**	**40300**	--	**255000**	**44600**
Sulfate	06/04/2015	E300.0A	--	--	**33600**	--	--
Sulfate	06/16/2015	E300.0A	--	--	**2610000**	--	--
Sulfide	01/20/2015	SM4500-S2-F	--	--	--	--	< 1000
Sulfide	05/21/2015	H8131	< 6	< 6	--	< 6	< 6
Sulfide	06/16/2015	H8131	--	--	< 6	--	--
Total Dissolved Solids	01/20/2015	SM2540C	--	--	--	--	**134000** **49500**
Total Dissolved Solids	03/31/2015	SM2540C	**390000**	**450000**	--	--	--
Total Dissolved Solids	04/15/2015	SM2540C	**500000**	**500000**	**200000**	**450000**	**180000**
Total Dissolved Solids	05/21/2015	SM2540C	**480000**	**487000**	--	**493000**	**225000**
Total Dissolved Solids	06/16/2015	SM2540C	--	--	**183000**	--	--
Total Organic Carbon	01/20/2015	SM5310B	--	--	--	--	**5200**
Total Organic Carbon	05/21/2015	SM5310C	< 1000	< 1000	--	**6200**	**3300**
Total Organic Carbon	06/04/2015	SM5310C	< 5000	< 1000	< 1000	**6100**	**3200**
Total Organic Carbon	06/16/2015	SM5310C	--	--	< 1000	--	--
Total Suspended Solids	01/20/2015	SM4500-P-E	--	--	--	--	**2400**

Table 2
Summary of Constituents in Expected Process Water
Bremo Power Station

			PZ-1 (North Pond)	PZ-2 (East Pond)	North Pond Toe Drain	Metals Pond	SWM Pond
Source Water Type			**Ash Dewatering Water**		**Toe Drain**	**Commingled Process and Stormwater**	
Total Suspended Solids	03/31/2015	SM2540D	**1100000**	**24000000**	--	--	--
Total Suspended Solids	04/15/2015	SM2540D	**750000**	**13000000**	**4300**	< 2500	**5400**
Total Suspended Solids	05/21/2015	SM2540D	**5640000**	**5120000**	--	**3000**	**47600**
Total Suspended Solids	06/04/2015	SM2540B	--	--	**175000**	--	--
Total Suspended Solids	06/04/2015	SM2540D	--	--	< 1000	--	--
Total Suspended Solids	06/16/2015	SM2540D	--	--	< 1000	--	--
Tributyltin	01/20/2015	GC-FPD	--	--	--	--	< 0.03
Tributyltin	05/21/2015	GC-FPD	< 0.03	< 0.03	--	< 0.03	< 0.03
Tributyltin	06/04/2015	GC-FPD	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tributyltin	06/16/2015	GC-FPD	--	--	< 0.01	--	--

ug/L - microgram per liter
pci/L - picocuries per liter
mpn/100ml - most probable number per 100 millilitres

Table 3
Statistical Summary of Constituents in Process Water
Bremo Power Station

	PZ-1 (North Pond)		PZ-2 (East Pond)		North Pond Toe Drain		Metals Pond		SWM Pond	
Source Water Type	Ash Dewatering Water				Toe Drain		Commingled Process and Stormwater			
Parameter	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
Bacteria (mpn/100ml)										
Entrococci	21	34	46	73	0.5	1	539	921	10	12
Escherichia coli	2	4	0	0	0	0	437	613	14	23
Dissolved Metals (ug/L)										
Aluminum	78.1	166	42	61.2	54.3	163	0	0	9.6	28.8
Antimony	8.69	15	14	21.4	0.126	0.378	0	0	0.282	0.615
Arsenic	271	453	185	604	0	0	1.49	2.57	2.27	5.9
Barium	527	648	694	788	45.5	109	51.8	55.9	84.3	117
Beryllium	0	0	0	0	0	0	0	0	0	0
Boron	1870	2880	1980	2420	661	803	235	246	367	428
Cadmium	0.03	0.12	1.79	7.05	0	0	0	0	0	0
Calcium	74700	126000	121000	142000	28100	32100	117000	121000	33300	36500
Chromium	0.288	1.15	56	223	0	0	0	0	0	0
Chromium (III)	0	0	112	223	0	0	0	0	0	0
Cobalt	1.05	2.62	7.96	20	0	0	0	0	0	0
Copper	1.69	2.51	203	773	1.11	2.25	2.86	4.36	3.49	6
Hexavalent Chromium	0	0	0	0	0	0	0	0	0	0
Iron	26.3	57.4	49	196	205	601	2.5	7.4	56	160
Lead	0	0	13.2	52.7	0	0	0	0	0	0
Lithium	257	454	388	520	1.84	5.53	190	370	0	0
Magnesium	24600	32600	23600	27300	8960	13400	4330	4640	8620	11300
Manganese	535	886	420	873	73	220	3.26	9.78	22.3	49.1
Mercury	0	0	0	0	0	0	0	0	0	0
Molybdenum	182	313	38.1	93.6	0	0	0	0	2	7
Nickel	5.64	14.6	61.2	187	2.65	7.1	16.6	25.9	2.87	8.6
Potassium	10700	12600	14600	15500	1290	1850	28500	29700	3330	3360
Selenium	0	0	1.81	7.24	0	0	2.88	5.29	0	0
Silver	0	0	0	0	0	0	0	0	0	0
Sodium	38000	79600	10300	12200	21000	21600	9600	9620	17100	19300
Sulfide	0	0	0	0	0	0	0	0	0	0
Thallium	0.33	0.531	7.3	19.3	0	0	0.047	0.141	0.015	0.061
Vanadium	54.4	88.8	183	291	0	0	0	0	0	0
Zinc	1.97	4.99	72	284	3.22	7.62	2.72	4.46	0.9	1.9
PCBs (ug/L)										
Aroclor 1016	0	0	0	0	0	0	0	0	0	0
Aroclor 1221	0	0	0	0	0	0	0	0	0	0
Aroclor 1232	0	0	0	0	0	0	0	0	0	0
Aroclor 1242	0	0	0	0	0	0	0	0	0	0
Aroclor 1248	0	0	0	0	0	0	0	0	0	0
Aroclor 1254	0	0	0	0	0	0	0	0	0	0
Aroclor 1260	0	0	0	0	0	0	0	0	0	0

Table 3
Statistical Summary of Constituents in Process Water
Bremo Power Station

	PZ-1 (North Pond)		PZ-2 (East Pond)		North Pond Toe Drain		Metals Pond		SWM Pond	
Source Water Type	Ash Dewatering Water				Toe Drain		Commingled Process and Stormwater			
Parameter	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
Pesticides (ug/L)										
4,4-DDD	0	0	0	0	0	0	0	0	0	0
4,4-DDE	0	0	0	0	0	0	0	0	0	0
4,4-DDT	0	0	0	0	0	0	0	0	0	0
Aldrin	0	0	0	0	0	0	0	0	0	0
alpha-BHC	0	0	0	0	0	0	0	0	0	0
alpha-Chlordane	0	0	0	0	0	0	0	0	0	0
alpha-Endosulfan	0	0	0	0	0	0	0	0	0	0
Azinphos-methyl	0	0	0	0	0	0	0	0	0	0
beta-BHC	0	0	0	0	0	0	0	0	0	0
beta-Endosulfan	0	0	0	0	0	0	0	0	0	0
Chlordane	0	0	0	0	0	0	0	0	0	0
Chlorpyrifos	0	0	0	0	0	0	0	0	0	0
delta-BHC	0	0	0	0	0	0	0	0	0	0
Demeton, Total	0	0	0	0	0	0	0	0	0	0
Demeton-O	0	0	0	0	0	0	0	0	0	0
Demeton-S	0	0	0	0	0	0	0	0	0	0
Diazinon	0	0	0	0	0	0	0	0	0	0
Dieldrin	0	0	0	0	0	0	0	0	0	0
Endosulfan Sulfate	0	0	0	0	0	0	0	0	0	0
Endrin	0	0	0	0	0	0	0	0	0	0
Endrin Aldehyde	0	0	0	0	0	0	0	0	0	0
gamma-BHC	0	0	0	0	0	0	0	0	0	0
Heptachlor	0	0	0	0	0	0	0	0	0	0
Heptachlor Epoxide	0	0	0	0	0	0	0	0	0	0
Malathion	0	0	0	0	0	0	0	0	0	0
Methoxychlor	0	0	0	0	0	0	0	0	0	0
Parathion	0	0	0	0	0	0	0	0	0	0
Toxaphene	0	0	0	0	0	0	0	0	0	0
Radium (pCi/L)										
Radium-226	1.57	2.07	3.48	6.3	0.116	0.23	0.31	0.492	0.33	0.729
Radium-228	0.49	1.47	1.4	2.88	0.0667	0.371	0.408	0.475	0.119	0.283

Table 3
Statistical Summary of Constituents in Process Water
Bremo Power Station

	PZ-1 (North Pond)		PZ-2 (East Pond)		North Pond Toe Drain		Metals Pond		SWM Pond	
Source Water Type	Ash Dewatering Water				Toe Drain		Commingled Process and Stormwater			
Parameter	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
SVOCs (ug/L)										
1,2,4-Trichlorobenzene	0	0	0	0	0	0	0	0	0	0
1,2-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0
1,2-Diphenylhydrazine	0	0	0	0	0	0	0	0	0	0
1,3-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0
1,4-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0
2,4,6-Trichlorophenol	0	0	0	0	0	0	0	0	0	0
2,4-Dichlorophenol	0	0	0	0	0	0	0	0	0	0
2,4-Dimethylphenol	0	0	0	0	0	0	0	0	0	0
2,4-Dinitrophenol	0	0	0	0	0	0	0	0	0	0
2,4-Dinitrotoluene	0	0	0	0	0	0	0	0	0	0
2,6-Dinitrotoluene	0	0	0	0	0	0	0	0	0	0
2-Chloronaphthalene	0	0	0	0	0	0	0	0	0	0
2-Chlorophenol	0	0	0	0	0	0	0	0	0	0
2-Nitrophenol	0	0	0	0	0	0	0	0	0	0
3,3'-Dichlorobenzidine	0	0	0	0	0	0	0	0	0	0
4,6-Dinitro-2-methylphenol	0	0	0	0	0	0	0	0	0	0
4-Bromophenyl Phenyl Ether	0	0	0	0	0	0	0	0	0	0
4-Chlorophenyl-phenylether	0	0	0	0	0	0	0	0	0	0
4-Nitrophenol	0	0	0	0	0	0	0	0	0	0
Acenaphthene	0	0	0	0	0	0	0	0	0	0
Acenaphthylene	0	0	0	0	0	0	0	0	0	0
Anthracene	0	0	0	0	0	0	0	0	0	0
Benzidine	0	0	0	0	0	0	0	0	0	0
Benzo[a]anthracene	0	0	0	0	0	0	0	0	0	0
Benzo[a]pyrene	0	0	0	0	0	0	0	0	0	0
Benzo[b]fluoranthene	0	0	0	0	0	0	0	0	0	0
Benzo[g,h,i]perylene	0	0	0	0	0	0	0	0	0	0
Benzo[k]fluoranthene	0	0	0	0	0	0	0	0	0	0
Bis(2-chloro-1-methylethyl) Ether	0	0	0	0	0	0	0	0	0	0
Bis(2-chloroethoxy)methane	0	0	0	0	0	0	0	0	0	0
Bis(2-chloroethyl) Ether	0	0	0	0	0	0	0	0	0	0
Bis(2-ethylhexyl) Phthalate	0	0	0	0	0	0	0	0	0	0
Butylbenzyl Phthalate	0	0	0	0	0	0	0	0	0	0
Chrysene	0	0	0	0	0	0	0	0	0	0
Dibenz[a,h]anthracene	0	0	0	0	0	0	0	0	0	0
Diethyl Phthalate	0	0	0	0	0	0	0	0	0	0
Dimethyl Phthalate	0	0	0	0	0	0	0	0	0	0
Di-n-Butyl Phthalate	0	0	0	0	0	0	0	0	0	0
Di-n-octyl Phthalate	0	0	0	0	0	0	0	0	0	0
Fluoranthene	0	0	0	0	0	0	0	0	0	0
Fluorene	0	0	0	0	0	0	0	0	0	0
Hexachlorobenzene	0	0	0	0	0	0	0	0	0	0
Hexachlorobutadiene	0	0	0	0	0	0	0	0	0	0
Hexachlorocyclopentadiene	0	0	0	0	0	0	0	0	0	0
Hexachloroethane	0	0	0	0	0	0	0	0	0	0
Indeno[1,2,3-cd]pyrene	0	0	0	0	0	0	0	0	0	0
Isophorone	0	0	0	0	0	0	0	0	0	0
Kepone	0	0	0	0	0	0	0	0	0	0
Naphthalene	0	0	0	0	0	0	0	0	0	0
Nitrobenzene	0	0	0	0	0	0	0	0	0	0
N-Nitrosodimethylamine	0	0	0	0	0	0	0	0	0	0
N-Nitroso-di-n-propylamine	0	0	0	0	0	0	0	0	0	0
N-Nitrosodiphenylamine	0	0	0	0	0	0	0	0	0	0
Nonylphenol	0	0	0	0	0	0	0	0	0	0
p-Chloro-m-cresol	0	0	0	0	0	0	0	0	0	0
Pentachlorophenol	0	0	0	0	0	0	0	0	0	0
Phenanthrene	0	0	0	0	0	0	0	0	0	0
Phenol	0	0	0	0	0	0	0	0	0	0
Pyrene	0	0	0	0	0	0	0	0	0	0

Table 3
Statistical Summary of Constituents in Process Water
Bremo Power Station

	PZ-1 (North Pond)		PZ-2 (East Pond)		North Pond Toe Drain		Metals Pond		SWM Pond	
Source Water Type	Ash Dewatering Water				Toe Drain		Commingled Process and Stormwater			
Parameter	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
Total Metals (ug/L)										
Aluminum	33100	76300	139000	249000	81.3	244	205	334	147	261
Antimony	8.68	13.5	9.92	13.4	0.238	0.715	0.253	0.355	0.42	0.909
Arsenic	486	1020	765	1460	0	0	6.08	8.57	3.77	7.43
Barium	1340	2510	4800	9370	47.3	114	59.4	59.9	92	125
Beryllium	9.52	22.6	60.4	87.7	0	0	0	0	0	0
Boron	1870	2790	2010	2190	649	777	228	238	356	413
Cadmium	0.724	2.26	5.9	11.5	0	0	0	0	0	0
Calcium	112000	137000	193000	228000	24400	32000	123000	125000	32600	35700
Chromium	47.1	112	354	557	0	0	1.19	3.08	0	0
Chromium (III)	68	112	450	557	0	0	0	0	0	0
Cobalt	36.5	77.6	171	265	0	0	2.8	5.5	0	0
Copper	144	363	1000	1780	1.16	2.81	3.91	6.05	5.11	11
Hexavalent Chromium	0	0	5.3	16	5.7	17	0	0	3	12
Iron	12900	27800	46500	103000	349	1030	700	1410	336	481
Lead	58.1	152	309	579	0	0	0.49	1.47	0.0635	0.254
Lithium	270	507	424	579	1.8	5.39	330	330	160	320
Magnesium	26900	32500	39200	47000	8910	13300	4470	4880	8700	11200
Manganese	928	1280	1470	1850	80.3	241	216	542	102	175
Mercury	0.0473	0.189	2.12	5.39	0.049	0.147	0	0	0	0
Molybdenum	169	305	24.4	64.9	0	0	0	0	2	7
Nickel	57	126	381	625	2.83	7.55	15.6	20.3	2.98	8.4
Potassium	16200	23400	29600	44500	1310	1860	29300	30200	3410	3470
Selenium	0	0	71.1	144	0	0	5.36	10.6	0	0
Silver	0	0	0	0	0	0	0	0	0	0
Sodium	36500	76000	12500	16200	21100	22000	9850	9890	17200	19600
Thallium	3.12	7.96	23.3	46.4	0	0	0.079	0.141	0.0335	0.134
Vanadium	218	407	1000	1420	0	0	0	0	1.4	2.8
Zinc	92.2	228	512	943	1.83	5.5	8.75	16.9	9.4	14

Table 3
Statistical Summary of Constituents in Process Water
Bremo Power Station

	PZ-1 (North Pond)		PZ-2 (East Pond)		North Pond Toe Drain		Metals Pond		SWM Pond	
Source Water Type	Ash Dewatering Water				Toe Drain		Commingled Process and Stormwater			
Parameter	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
VOCs (ug/L)										
1,1,1-Trichloroethane	0	0	0	0	0	0	0	0	0	0
1,1,2,2-Tetrachloroethane	0	0	0	0	0	0	0	0	0	0
1,1,2-Trichloroethane	0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethane	0	0	0	0	0	0	0	0	0	0
1,1-Dichloroethene	0	0	0	0	0	0	0	0	0	0
1,2-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0
1,2-Dichloroethane	0	0	0	0	0	0	0	0	0	0
1,2-Dichloropropane	0	0	0	0	0	0	0	0	0	0
1,3-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0
1,3-Dichloropropene, Total	0	0	0	0	0	0	0	0	0	0
1,4-Dichlorobenzene	0	0	0	0	0	0	0	0	0	0
2-Chloroethyl Vinyl Ether	0	0	0	0	0	0	0	0	0	0
Acrolein	0	0	0	0	0	0	0	0	0	0
Acrylonitrile	0	0	0	0	0	0	0	0	2.98	8.95
Benzene	0	0	0	0	0	0	0	0	0	0
Bromodichloromethane	0	0	0	0	0	0	0	0	0	0
Bromoform	0	0	0	0	0	0	0	0	0	0
Bromomethane	0	0	0	0	0	0	0	0	0	0
Carbon Tetrachloride	0	0	0	0	0	0	0	0	0	0
Chlorobenzene	0	0	0	0	0	0	0	0	0	0
Chloroethane	0	0	0	0	0	0	0	0	0	0
Chloroform	0	0	0	0	0	0	0	0	0	0
Chloromethane	0	0	0	0	0	0	0	0	0	0
cis-1,3-Dichloropropene	0	0	0	0	0	0	0	0	0	0
Dibromochloromethane	0	0	0	0	0	0	0	0	0	0
Ethylbenzene	0	0	0	0	0	0	0	0	0	0
m,p-Xylenes	0	0	0	0	0	0	0	0	0	0
Methylene Chloride	0	0	0	0	0	0	0	0	0	0
o-Xylene	0	0	0	0	0	0	0	0	0	0
Tetrachloroethene	0	0	0	0	0	0	0	0	0	0
Toluene	0	0	0	0	0	0	0	0	0	0
trans-1,2-Dichloroethene	0	0	0	0	0	0	0	0	0	0
trans-1,3-Dichloropropene	0	0	0	0	0	0	0	0	0	0
Trichloroethene	0	0	0	0	0	0	0	0	0	0
Trichlorofluoromethane	0	0	0	0	0	0	0	0	0	0
Vinyl Chloride	0	0	0	0	0	0	0	0	0	0
Xylenes, Total	0	0	0	0	0	0	0	0	0	0

Table 3
Statistical Summary of Constituents in Process Water
Bremo Power Station

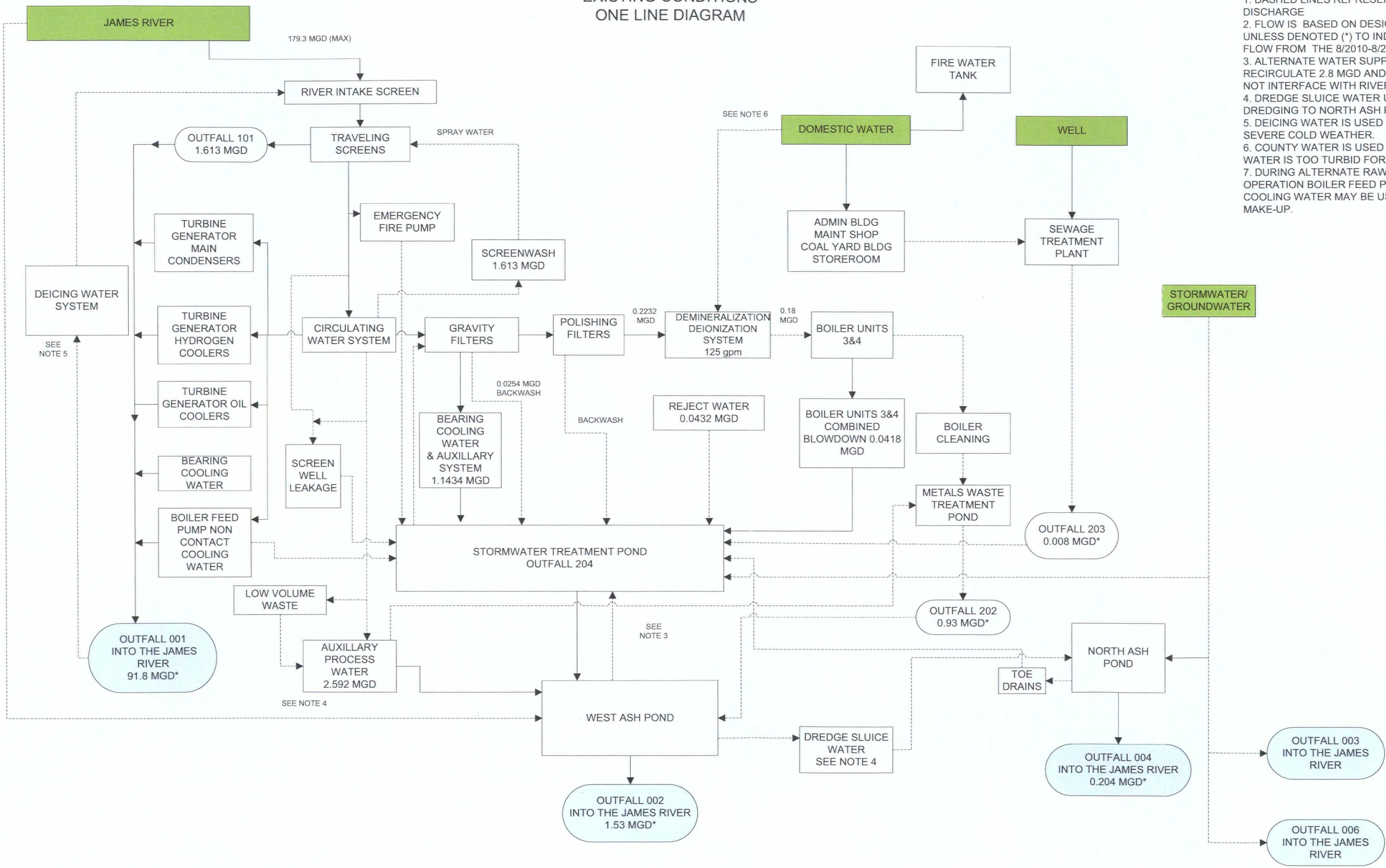
	PZ-1 (North Pond)		PZ-2 (East Pond)		North Pond Toe Drain		Metals Pond		SWM Pond	
Source Water Type	Ash Dewatering Water				Toe Drain		Commingled Process and Stormwater			
Parameter	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
WQ/Other (ug/L)										
Alkalinity, Total	377000	430000	399000	420000	85000	110000	136000	136000	103000	113000
Ammonia	280	330	300	310	0	0	0	0	0	0
Ammonia Nitrogen	460	460	210	210	0	0	90	90	70	80
Biochemical Oxygen Demand	0	0	700	2000	200	700	0	0	0	0
Bromide	400	790	55	110	120	230	1560	3050	60	180
Chemical Oxygen Demand	643000	1170000	2510000	3920000	0	0	18400	22100	5430	16300
Chloride	14800	17000	4200	5500	11000	11800	1900	3800	14600	15000
Cyanide	0	0	0	0	0	0	6	12	0	0
Fluoride	480	600	83	130	30	100	500	500	15	44
Hardness	455000	476000	654000	764000	96100	130000	322000	330000	117000	128000
Nitrate	0	0	0	0	0	0	0	0	85	170
Nitrite	0	0	0	0	0	0	0	0	0	0
Nitrogen, Nitrate-Nitrite	10	40	41	83	53	120	20	40	70	170
Nitrogen, Total Kjeldahl	1130	1480	6320	11000	110	320	480	560	110	340
Oil & Grease, Total Rec	0	0	0	0	0	0	0	0	0	0
Phosphorus	1720	2930	8650	12900	7	20	10	20	30	60
Sulfate	40000	74000	45400	53000	894000	2610000	238000	255000	36600	44600
Sulfide	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	460000	500000	479000	500000	192000	200000	472000	493000	152000	225000
Total Organic Carbon	0	0	0	0	0	0	6200	6200	3900	5200
Total Suspended Solids	2500000	5640000	14000000	24000000	44800	175000	2000	3000	18500	47600
Tributyltin	0	0	0	0	0	0	0	0	0	0

ug/L - microgram per liter
pci/L - picocuries per liter
mpn/100ml - most probable number per 100 millilitres
Zero Value used in place of all non-detected parameters

APPENDIX I

Existing Conditions One-Line Diagram

BREMO POWER STATION
STATION WATER FLOW
EXISTING CONDITIONS
ONE LINE DIAGRAM



NOTES:
1. DASHED LINES REPRESENT INTERMITTENT DISCHARGE
2. FLOW IS BASED ON DESIGN CAPACITY UNLESS DENOTED (*) TO INDICATE AVERAGE FLOW FROM THE 8/2010-8/2014 DMRS
3. ALTERNATE WATER SUPPLY WILL RECIRCULATE 2.8 MGD AND NORMALLY WILL NOT INTERFACE WITH RIVER
4. DREDGE SLUICE WATER USED ONLY WHEN DREDGING TO NORTH ASH POND
5. DEICING WATER IS USED ONLY DURING SEVERE COLD WEATHER.
6. COUNTY WATER IS USED WHEN RIVER WATER IS TOO TURBID FOR MAKE-UP WATER
7. DURING ALTERNATE RAW WATER SYSTEM OPERATION BOILER FEED PUMP NON CONTACT COOLING WATER MAY BE USED AS SYSTEM MAKE-UP.

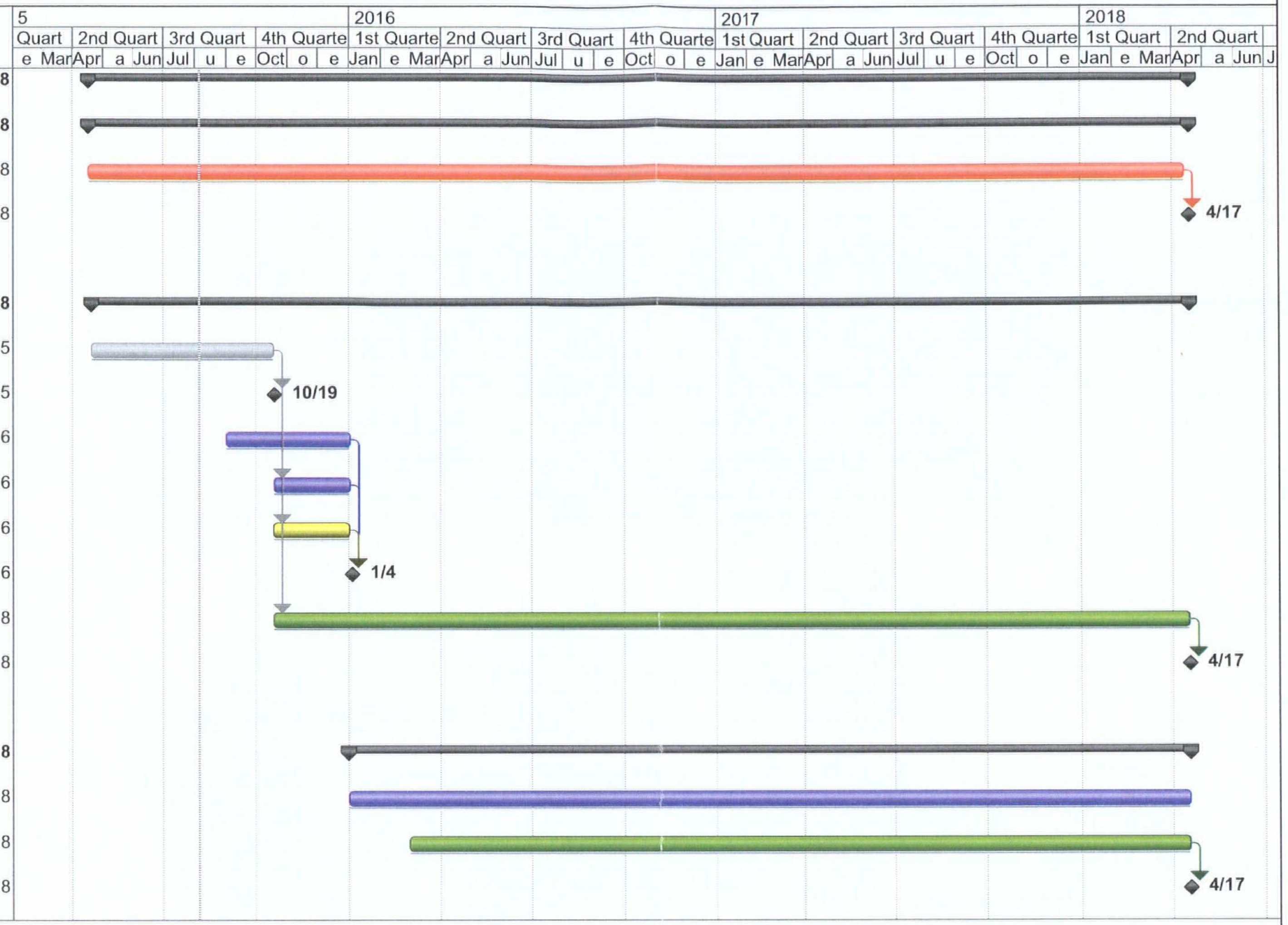
REVISED 8/2015

APPENDIX II

Tentative Closure Construction Schedule

Bremo Power Station CCR Pond Closure Project - Construction and VPDES Schedule

ID	Task Name	Start	Finish
1	**Construction Schedule**	**Fri 4/17/15**	**Tue 4/17/18**
2	**Regulatory Schedule**	**Fri 4/17/15**	**Tue 4/17/18**
3	Closure Timeframe for CCR Impoundments	Fri 4/17/15	Thu 4/12/18
4	Closure Date from EPA CCR Rule	Tue 4/17/18	Tue 4/17/18
5			
6	**West Ash Pond Clean Closure Schedule (includes Metals Pond)**	**Mon 4/20/15**	**Tue 4/17/18**
7	Hydraulic Dredging of CCR to North Pond and Decanting	Mon 4/20/15	Sun 10/18/15
8	Inactivate CCR Ponds (West and North Ash Ponds)	Mon 10/19/15	Mon 10/19/15
9	**Stage I - Stormwater Management Pond w/TSS control to Outfall 002**	Tue 9/1/15	Fri 1/1/16
10	**Stage I - Contact Stormwater from West Ash Pond w/TSS control to North Ash Pond (Outfall 004)**	Mon 10/19/15	Fri 1/1/16
11	Repurposing of the West Ash Pond	Mon 10/19/15	Fri 1/1/16
12	**Stage I - Routing of Stormwater Management Pond to Low Volume Waste Pond (Outfall 002)**	Mon 1/4/16	Mon 1/4/16
13	Clean Closure of the remaining West Ash Pond and Metals Pond	Mon 10/19/15	Mon 4/16/18
14	West Ash Pond and Metals Pond Clean Closed	Tue 4/17/18	Tue 4/17/18
15			
16	**North and East Ash Pond Closure Schedule**	**Fri 1/1/16**	**Tue 4/17/18**
17	**Stage II - Contact Stormwater/Dewatering Water from North/East Ponds w/TSS Control (Outfall TBD)**	Fri 1/1/16	Mon 4/16/18
18	Closure of the North and East Ash Ponds	Tue 3/1/16	Mon 4/16/18
19	North and East Ash Ponds Closed	Tue 4/17/18	Tue 4/17/18

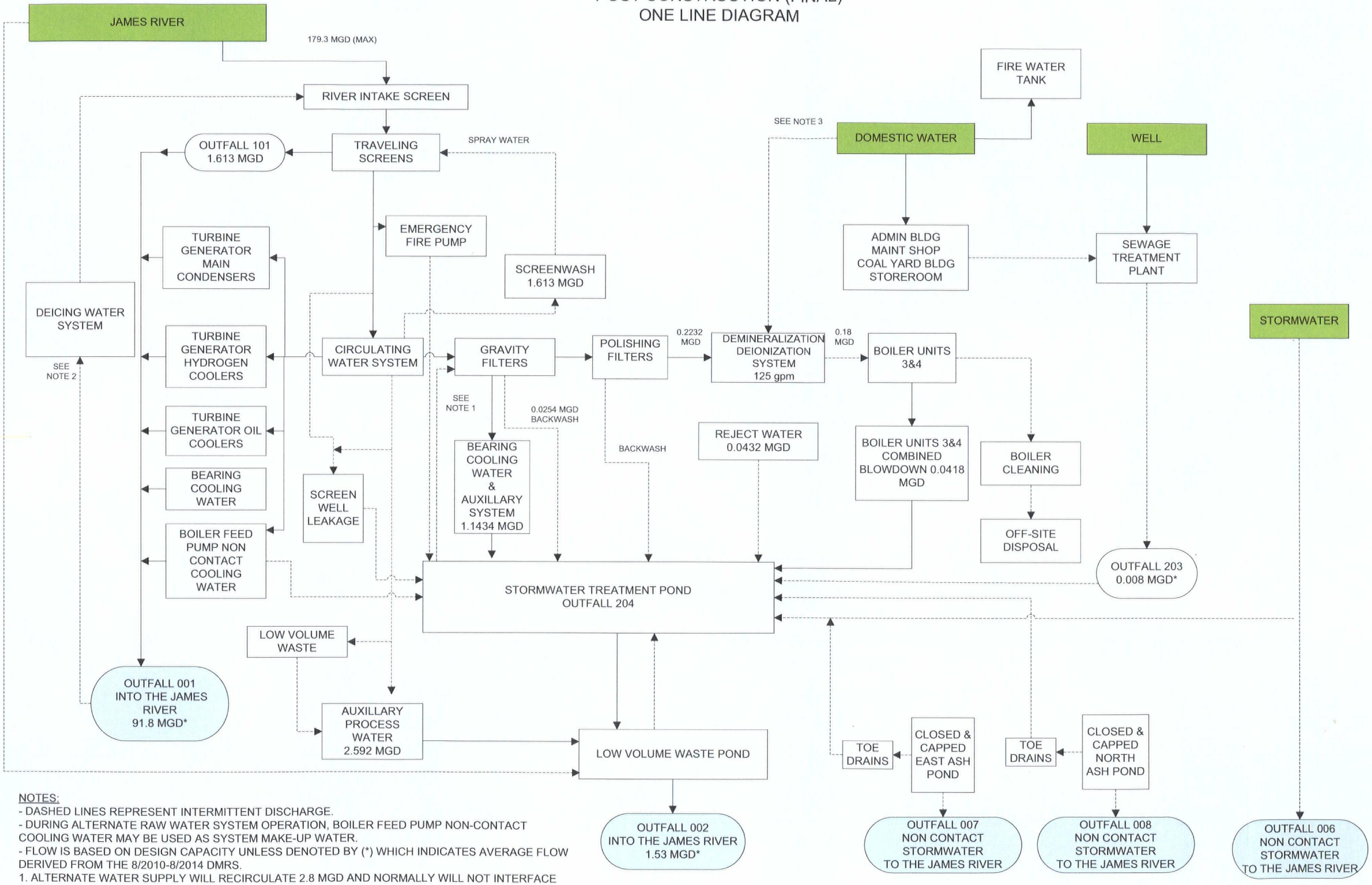


Project: VPDES Schedule Ver. 1.1 Date: Wed 8/5/15	Task		Progress		Summary		External Tasks		Deadline
	Split		Milestone		Project Summary		External Milestone	

APPENDIX III

Post-Construction (Final) On-Line Diagram

BREMO POWER STATION
STATION WATER FLOW
POST CONSTRUCTION (FINAL)
ONE LINE DIAGRAM



NOTES:
- DASHED LINES REPRESENT INTERMITTENT DISCHARGE.
- DURING ALTERNATE RAW WATER SYSTEM OPERATION, BOILER FEED PUMP NON-CONTACT COOLING WATER MAY BE USED AS SYSTEM MAKE-UP WATER.
- FLOW IS BASED ON DESIGN CAPACITY UNLESS DENOTED BY (*) WHICH INDICATES AVERAGE FLOW DERIVED FROM THE 8/2010-8/2014 DMRS.

1. ALTERNATE WATER SUPPLY WILL RECIRCULATE 2.8 MGD AND NORMALLY WILL NOT INTERFACE WITH RIVER.
2. DEICING WATER IS USED ONLY DURING SEVERE COLD WEATHER.
3. COUNTY WATER IS USED WHEN RIVER WATER IS TOO TURBID FOR USE AS MAKE-UP WATER.

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